

LIBERIA

REBUILDING BASIC HEALTH SERVICES (RBHS)



YEAR 5 ANNUAL REPORT

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31 OCTOBER 2013



Happiness after a safe facility delivery

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Introductory note

This report on the fifth year of the Rebuilding Basic Health Services Project covers the period of October 1, 2012 to October 31, 2013 in compliance with the Cooperative Agreement No: 669-A-00-09-00001-00, which specifies October 31, 2013 as the End-Of-Project (EOP) date.

RBHS Mission Statement

RBHS supports the Ministry of Health and Social Welfare to establish and maintain a comprehensive range of high quality health services for the Liberian people through the pillars of the national health plan -- the Essential Package of Health Services (EPHS), human resources, infrastructure, and support systems – as well as through mobilizing communities for health. RBHS is committed to the principles of partnership, participation, capacity building, and evidence-based decision making. Youth sensitivity and gender equity are emphasized in all RBHS activities.

Acronyms and abbreviations

ACT	Artemisinin-based combination therapy
AIDS	Acquired immune deficiency syndrome
ANC	Ante-natal care
ART	Anti-retroviral therapy
ASRH	Adolescent sexual and reproductive health
BCC	Behavior change communication
BLSS	Basic life-saving skills
BPHS	Basic Package of Health Services
CHSD	Community Health Services Division
CHDC	Community Health Development Committee
CHEST	Community Health Education Skill Tools
CHO	County Health Officer
CHT	County Health Team
CHV	Community health volunteer
CHAI	Clinton Health Access Initiative
CHSWT	County Health and Social Welfare Team
CM	Certified midwife
CYV	Community youth volunteer
CYP	Couple-years of protection
DHIS	District Health Information System
DOTS	Directly observed therapy – short course
DSS	Decision Support Systems
DWG	Decentralization Working Group
EBSNM	Esther Bacon School of Nursing and Midwifery
EHT	Environmental health technician
EML	Essential medicines list
EMMP	Environmental Mitigation and Monitoring Plan
EmONC	Emergency obstetric and neonatal care
ENA	Essential Nutrition Actions
EPI	Expanded Program on Immunization
EPHS	Essential Package of Health Services
ETS	Effective Teaching Skills
FBO	Faith-based organization
FGD	Focus group discussion
FHD	Family Health Division
FP	Family planning
GBV	Gender-based violence
gCHV	(General) community health volunteer
HBLSS	Home-based life saving skills
HIS	Health information system
HIV	Human immunodeficiency virus
HMIS	Health management information system
HBMNC	Home-based maternal, neonatal and child health care
HPD	Health Promotion Division
HRO	Human resource officers
iCCM	Integrated Community Case Management
IEC	Information, Education and Communication

IMAD	Improved Malaria Diagnostic
IMAT	Inventory Management Assessment Tool
IMNCI	Integrated management of neonatal and childhood illness
IPC	Interpersonal communication
IPT	Intermittent preventive treatment of malaria (in pregnancy)
IPT2	Intermittent preventive treatment of malaria (in pregnancy), 2 nd dose
IR	Intermediate result
IRC	International Rescue Committee
IRS	Indoor residual spraying (of anti-malarial insecticide)
ITN	Insecticide-treated net
IUD	Intrauterine device
IU	Infrastructure Unit
JHU/CCP	Johns Hopkins University Center for Communication Programs
JSI	John Snow Research & Training, Inc.
LAPHT	Liberia Association of Public Health Technicians
LBNM	Liberia Board of Nursing and Midwifery
LISGIS	Liberia Institute of Statistics & Geo-Information Services
MCHIP	Maternal and Child Health Integrated Program
MDR	Multi-drug resistant
M&E	Monitoring and evaluation
MH	Mental health
MNCH	Maternal, neonatal, and child health
MOHSW	Ministry of Health and Social Welfare
MOU	Memorandum of understanding
MPCHS	Mother Pattern College of Health Sciences
MSH	Management Sciences for Health
MTI	Medical Teams International
MTP/SER	Midwifery Training Program/South Eastern Region
NACP	National AIDS Control Program
NDS	National Drug Service
NGO	Non-governmental organization
NHPD	National Health Promotion Division
NHPP	National Health Policy and Plan 2007-2011
NHSWPP	National Health and Social Welfare Policy and Plan 2011-2021
NLTCP	National Leprosy and Tuberculosis Control Program
NMCP	National Malaria Control Program
NTCL	National Traditional Council of Liberia
OIC	Officer in charge
OPD	Outpatient department
OR	Odds ratio
ORS	Oral rehydration salts/solution
PA	Physician's assistant
PBC	Performance-based contract
PBF	Performance-based financing
PCT	Program Coordination Team
PLAL	Positive Living Association of Liberia
PLWHA	Persons living with HIV/AIDS
PMI	President's Malaria Initiative
PMTCT	Prevention of mother-to-child transmission
PPAL	Planned Parenthood Association of Liberia

PSA	Public Service Announcement
PPH	Post-Partum Hemorrhage
PSI	Population Services International
QA	Quality assurance
RBHS	Rebuilding Basic Health Services
REP	Reaching Every Pregnant woman
RFP	Request for proposal
RH	Reproductive health
RN	Registered nurse
RUD	Rational use of drugs
SBA	Skilled Birth Attendant
SBMR	Standards-based management and recognition
SOPs	Standard operating procedures
SP	Sulfadoxine-pyrimethamine (Fansidar)
STTA	Short-term Technical Assistance
TA	Technical Assistance
TB	Tuberculosis
TFR	Total fertility rate
TNIMA	Tubman National Institute for Medical Arts
TOT	Training of trainers
TTM	Trained traditional midwife
TU	Training Unit
USAID	United States Agency for International Development
WASH	Water, sanitation, and hygiene promotion

Executive Summary

Rebuilding Basic Health Services (RBHS) is the United States Government's largest project in support of the Liberian Ministry of Health and Social Welfare (MOHSW). The project has been implemented over a 5-year period, which ended in October 2013.

In response to the Ten Year National Health Policy and Plan and to USAID/Washington's new global health initiative, USAID *FORWARD*, the RBHS Project was redesigned by USAID in the summer of 2011. The main change in scope of work called for an expansion of health system strengthening activities, with greater emphasis on capacity building of MOHSW at both central and county levels. The project maintained its two intermediate results:

Intermediate Result 1: Increased access to basic health services through improved provision of quality health services and adoption of positive health behaviors

Intermediate Result 2: Increase the quality of health services through improving infrastructure, health workforce and systems performance by enhancing capacity to plan, manage and monitor a decentralized health system

Also, based on the principles of USAID's Global Health Initiative, in September 2011, the Government of Liberia and USAID signed the Fixed Amount Reimbursement Agreement (FARA), which provides direct funding from the United States to the Government of Liberia for the delivery of a specified set of health activities, in support of the priorities defined in the National Health and Social Welfare Policy and Plan 2011-2021 (NHSWPP). FARA is a four year agreement (September 2011 – June 2015) for a total amount of \$42,000,000. RBHS has been requested to provide technical assistance to the MOHSW for the implementation of these activities and assist with the validation of the deliverables under the FARA.

Consistent with the changes to USAID's in-country strategy, RBHS has been working more closely with the MOHSW, gradually shifting from service delivery and placing greater emphasis on capacity building and health systems strengthening. For that purpose, RBHS hired a Capacity Building Advisor and a Performance-based Financing (PBF) Advisor, who both started work in January 2012.

Summary of successes, challenges and constraints, and lessons learned

In Year 5, RBHS continued to work on various program interventions including (1) increased access to comprehensive MNCH interventions; (2) increased uptake of critical malaria interventions; (3) increased access to quality HIV/AIDS services; (4) increased access to comprehensive family planning (FP) and reproductive health (RH) services; and (5) finalizing infrastructural work including environmental interventions.

But Year 5, after a year of capacity assessment and strategic planning, was the first year of actual capacity building interventions both at central as well as at county levels. While the overall effort of capacity development in the six building blocks is massive and needs more time for sustainable results, substantial progress has been made in several areas addressing individual, organizational, and system capacity. Some examples given below are: improving

service delivery through performance based financing (PBF) and the use of in-patient standards; integrating the community health and health promotion divisions; developing the integrated Human Resource Information System (iHRIS); strengthening the Health Management Information System (HMIS); moving forward on Internal Communications; and supporting the development of a National Health Insurance System.

The establishment of the PBF Unit of the MOHSW started in July 2011. Initially most of the time was spent on strategic planning and tools development. After three initial quarters with no significant improvement in PBF indicators, the last five quarters (up to June 2013) posted a **steady improvement in PBF service delivery indicators**. Despite being relatively new, the PBF unit is now often solicited to contribute to other MOHSW initiatives, such as assessment and planning of the counties capacity for contracting, especially as the MOHSW gradually moves from contracting out to contracting in the delivery of health services (organizational and individual CB).

Enormous work in the past year has gone into **the development of in-patient standards** for various service delivery clusters. The standards have been rolled out in four pilot hospitals and a first learning session was organized to share best practices and lessons learned (system and organizational CB).

As described in previous documents, one of the main problems of the central MOHSW is its fragmentation into multiple units and its lack of coordination between them. In the past year, RBHS successfully facilitated the **integration of the activities of the community health services and health promotion divisions of the MOHSW**, better defining the functions of each. While CHSD focuses on strengthening community structures, NPHD's focus is on behavioral change. The joint efforts undertaken in the demonstration sites have substantially increased the efficiency of both divisions (organizational CB).

Two aspects of the implementation of iHRIS stand out as lessons learned to apply out-of-country training for individual, organizational and systems benefits. The first was sponsoring training participants who were representatives of the various units that will start up, manage and maintain the system. The second was timing the support of the technical assistance provider soon after three of the five had been trained. This timing allowed for immediate application and rapid identification of skills and concepts that were not fully mastered during the training program. The consultant, headquartered in Lagos, continues to provide support at a distance and will return to assess the pilot and further develop the system with the team (system building and organizational CB).

RBHS has made significant progress in building individual, organizational, and system capacity of the HMER division of MOHSW, as well as of the county teams **to better use the information generated by the HMIS**. Particularly the problem solving workshops were very successful. Participants changed their way of thinking about the link between problem identification and solving. The workshops were well attended and appreciated by the participants. They really responded to an urgent need of CHTs for methodological support to their day to day decision making processes, in providing them with systematic knowledge and skills to problem solving. RBHS carefully documented all proceedings of the

workshop and hopes to write a summary report after the Lofa workshop (individual and organizational CB).

Also, the county and central level M&E and HMIS staff **have developed capacity to use DHIS2 for data entry, analysis and producing various reports.** HMER for the first time has held a DHIS2 demonstration to senior central MOHSW staff which was well appreciated and applauded. Also, both the uploading of population data to DHIS2 and the successful migration of DHIS1 legacy data to DHIS2 are great achievements facilitating the analysis and use of information (system building).

RBHS has learned that intermittent short term TA that is brief and focused can be followed up by RBHS and MOHSW staff to ensure that key action steps are taken prior to a consultant's return. In the case of the Internal Communication Strategy, it was important that the Deputy Minister of Administration appointed a focal person and engaged a small group from many departments to move this forward. Failing this focused follow up by MOHSW and RBHS, competing priorities easily fill the time that busy officers have available for new initiatives, important though they are. This approach has contributed to **moving forward on the Internal Communication Strategy** and has also been successfully used with DHIS, iHRIS, M&E, BCC and Professional Development of the Training Institutions.

The development of a national health insurance system for Liberia is a top priority for both the Government of Liberia and USAID. President Ellen Johnson Sirleaf has clearly expressed her desire to find mechanisms that would allow Liberians to access health care at a reasonable cost. Minister of Health Dr. Gwenigale in his opening speech at the stakeholders meeting stated that the "**Liberian Health Equity Fund**" (LHEF) would be his legacy. USAID noted that their "front office" is tracking the universal health coverage developments closely. The initial work of consensus building on the design options of the health insurance system has been a strategic success. Not only have the principal stakeholders agreed on the way forward, but the adopted system for Liberia is quite compatible with the principles of universal health coverage, as proposed by WHO and more recently by the World Bank.

Year 5 also continued to show **excellent achievements in service delivery as measured through HMIS data from July 2012 – June 2013 in the three FARA counties.** These achievements are even more remarkable knowing that they cover all the facilities in the three counties (and not only those of the formerly RBHS managed facilities). Here are some examples:

- Deliveries in facility by a skilled birth attendant (SBA) went from 51% in Year 4 to 61% in Year 5
- Children under 1 Year who received Penta-3 vaccination went from 92% in Year 4 to 100% in Year 5
- Pregnant women provide with a 2nd dose of IPT for malaria went from 47% in Year 4 to 51% in Year 5
- Children under 5 treated with Artemisinin-based Combination Treatments (ACTs) went from 87% in Year 4 to 91% in Year 5
- Couple-years of contraceptive protection (CYPs) went from 21,949 to 35,627, which is an increase of 62%

In spite of these successes, several challenges and constraints remain. RBHS has continued to work with the MOHSW and partners on these issues and progress has made in addressing each of them.

The most challenging issue faced by RBHS is the absorptive capacity of counterparts within the MOHSW and county health teams (CHTs). Most of the capacity building interventions have to compete with routine activities of the central MOHSW and the CHSWTs and the requirements and opportunities that other donors present. Also, as a result of a more than ten years period of civil unrest and instability, many of the mid-level professionals have limited basic education and professional training.

Another hurdle in the gradual move towards a decentralized service delivery system is the ongoing fragmentation of the health system. National disease oriented programs continue to dominate service delivery management and are barriers to the implementation of the integrated service delivery by the counties. Internal communications between programs at central level and between the central level and the CHSWTs are dysfunctional. While RBHS has started to support the MOHSW and the development of an internal communications strategy and test out implementation with NMCP, progress is slow and needs more time.

Supportive supervision is a key intervention to improve the quality of service delivery. While RBHS has provided technical support to the development of tools for supportive supervision and to the organization of regular supervisory visits, the ultimate steps to benefit from supportive supervision are not yet in place: feedback to the care providers and support them in solving the problems identified. These steps require the introduction of a coaching culture by managers and supervisors and gradual change in behavior from hierarchical and administrative attitudes to a new set of values such as mentoring and staff development.

Future Directions

As stated several times in this report, continued work on comprehensive capacity building will be required for sustainable results on health system strengthening and for impact on health outcomes. The one year extension of RBHS is therefore an excellent opportunity to continue many of the ongoing interventions and better prepare a transition strategy before the end of the project. We will also continue our support to the implementation of the FARA, which will end in 2015, and help prepare for a renewed mechanism of direct funding by the USG to the GOL.

At the request of USAID, RBHS has prepared an extension work plan in close collaboration with the MOHSW. The new End-of-Project date is October 31, 2014, but most activities will end in July 2014 to allow for the close-out of the project. Some highlights of the proposed interventions in each of the six building blocks are:

- *Service Delivery*

During the extension year, RBHS will help institutionalize the supportive supervision system with a focus on feedback and problem solving. Both the supportive supervision and

the QA/QI process will be integrated into an in-service training program, to institutionalize continuing education as durable mechanism to improve the quality of service delivery. RBHS will also continue to expand and solidify PBF in the FARA counties as another mechanism to improve the quality of service delivery.

RBHS will also work closely with the MOHSW and the counties to solidify the community health services delivery system, including the scale up of Misoprostol distribution, family planning, and iCCM.

- *Human Resource management*

RBHS will further work with the MOHSW on human resource management by setting up a performance appraisal system in collaboration with CSA and GEMS. Performance appraisal is another opportunity to work on the establishment of a “coaching culture”, and can form the basis of a more robust performance management system and merit based civil service over time.

- *HMIS and Monitoring & Evaluation*

The work on HMIS strengthening will continue focusing on the use of information for decision making and problem solving. RBHS will also support the Ministry of Health in better integrating various data sources via the establishment of a integrated data depository (data warehouse)

- *Supply chain management and infrastructure*

RBHS in close collaboration with DELIVER will support the MOHSW to gradually decentralize supply chain management to the county level. Also, continued support will be provided to the Infrastructure Unit and to the construction of new Central Drug Warehouse.

- *Health Insurance*

RBHS and its partner ICD will continue to provide support to the GOL to implement the proposed interventions of the Liberia Health Equity Fund (LHEF) roadmap.

- *Coordination and Leadership*

None of the earlier proposed reforms can be implemented without leadership at both central and county levels. RBHS will provide STTA to organize participatory training for senior managers at the central level and in the FARA counties.

Background and Introduction

Rebuilding Basic Health Services (RBHS) is the United States Government's largest project in support of the Liberian Ministry of Health and Social Welfare (MOHSW). The project has been implemented over a 5-year period, which ended in October 2013. A partnership among four US-based agencies¹, RBHS employs a three-pronged strategic approach:

- Strengthening and extending **service delivery** through performance-based contracts with four international non-governmental organizations (NGO) and a grant to a local NGO partners² to support 112 health facilities in seven counties (Intermediate Result - IR 1);
- Strengthening Liberia's **health system** in the areas of human resources, infrastructure, policy development, and monitoring and evaluation (IR 2); and
- Preventing disease and promoting more healthful behaviors through **behavior change communication** and community mobilization (IRs 1 and 2).

Largely due to the leadership, vision, and effective planning of the MOHSW, the health sector in Liberia is seen by many as perhaps the most effective sector in the country. It has consistently employed a participatory approach to the development of key policies, plans, and programs; it has welcomed contributions from international partners, while at the same time affirming its central leadership role; and it has maintained a commitment to transparency and accountability, thereby earning the trust and cooperation of its partners. A new development phase was inaugurated in 2011 with the release of the new National Health and Social Welfare Policy and Plan 2011-2021 (NHSWPP). RBHS has proven itself to be an effective partner of the MOHSW during the transition phase from emergency to development and was the most active collaborator in the development of the new 10-year policy and plan.

In response to the Ten Year National Health Policy and Plan and to USAID/Washington's new global health initiative, USAID *FORWARD*, the RBHS Project was redesigned by USAID in the summer of 2011. The changes in project design included:

- Finalization of transition of current performance-based contracts (PCBs) to MOHSW by July 2012;
- Expansion of health system strengthening activities, with greater emphasis on capacity building of MOHSW at both central and county levels; and
- Expansion of RBHS activities to include responsibility for four additional areas:
 1. Management of the Participant Training and Human Capacity Development Project (FORECAST Project), following the cessation of the Academy for Educational Development (AED) contract in May 2011;
 2. Coordination of technical assistance to MOHSW's Infrastructure Unit (IU);
 3. Provision of funding to support a research study by the Royal Tropical Institute of the Netherlands (KIT), on behalf of MOHSW;

¹ RBHS sub-recipients are Jhpiego, the Johns Hopkins University Center for Communication Programs (JHU/CCP), and Management Sciences for Health (MSH).

² RBHS implementing partners are: Africare, EQUIP, International Rescue Committee (IRC), Medical Teams International (MTI), and MERCI, the local NGO

4. Assistance to the Liberian Board of Nursing and Midwifery (LBNM) and to the Liberian Medical and Dental Council (LMDC) to develop accreditation procedures for health training institutions.

In addition, based on the principles of USAID's Global Health Initiative the Government of Liberia and USAID signed the Fixed Amount Reimbursement Agreement (FARA) in September 2011. This 4 year agreement, resulting in a total amount of \$42,000,000, provides direct funding from the United States to the Government of Liberia for the delivery of a specified set of health activities, in support of the priorities defined in the National Health and Social Welfare Policy and Plan 2011-2021 (NHSWPP). RBHS has been requested to provide technical assistance to the MOHSW for the implementation of these activities and assist with the validation of the deliverables under the FARA.

Consistent with the changes to USAID's in-country strategy, RBHS has been working more closely with the MOHSW, gradually shifting from service delivery and placing greater emphasis on capacity building and health systems strengthening. In January 2012, RBHS hired a Capacity Building Advisor and a Performance-based Financing (PBF) Advisor to support this transition. The results of these efforts are outlined under IR 2.

RBHS has also addressed the four additional areas listed above. Activity #3 was completed in Year 4 and the KIT Research Study report was produced and disseminated³. The remaining three activities are ongoing and have been integrated in the Year 5 work plan under the following project interventions:

- FORECAST Project activities under IR 2 Intervention 2.1.11
- Technical assistance (TA) to MOHSW's Infrastructure Unit IR 1 Intervention 1.5
- TA to LBNM and LMDC under IR 2 Intervention 2.3

This annual report reviews the results, successes, challenges, and lessons learned from the fifth year of RBHS implementation, from October 1, 2012 to October 31, 2013. A summary is presented for the interventions under IR 1 and IR 2, while annexes provide additional details on specific topic areas as well as a detailed status of the work plan activities implementation (see Annex 7). The report includes a chapter on project management and a summary report on expenditures to date.

³ Sondorp, Egbert, and Coolen Anne. The Evolution of Health Service Delivery in the Liberian Health Sector between 2003 and 2010: A policy analysis. LSHTM/London and Royal Tropical Institute/Amsterdam. Final Report 2012.

Intermediate Result 1: Increased access to basic health services through improved provision of quality health services and adoption of positive health behaviors

In the first 4 years of the project RBHS has worked with NGO partners, through performance-based contracts (PBC) or grants, to increase access and improve the quality of the health service delivery at 112 facilities in the counties of Bomi, Bong, Lofa, Montserrado, Nimba, Grand Cape Mount and River Gee. RBHS also worked on promoting healthy behaviors and mobilizing communities around priority public health issues through an integrated behavior change communication (BCC) strategy.

All PBCs with RBHS came to an end in June 2012 and contracting as well as management was transferred to the MOHSW. The nature of RBHS support changed from direct involvement in service delivery to assisting both the central MOHSW as well as the county health and social welfare teams CHSWTs in building service delivery systems, improving management practices, in-service training (limited to training of trainers, or TOT), and coaching program managers and county health team members.

In the following paragraphs we summarize activities undertaken in Year 5 in five program areas. We look critically at the results in terms of successes, challenges, constraints, and lessons learned and list a number of key activities planned for the project extension.

- Intervention 1.1: Increase access to comprehensive maternal, neonatal and child health (MNCH) services
- Intervention 1.2: Increase uptake of critical malaria interventions
- Intervention 1.3: Increase access to quality HIV/AIDS services, with an emphasis on prevention
- Intervention 1.4: Increase access to comprehensive family planning (FP) and reproductive health (RH) services
- Intervention 1.5. Finalize infrastructural work including environmental interventions

For more details, refer to the Year 5 Work Plan Status Report in Annex 7.

Intervention 1.1: Increase access to comprehensive MNCH services

RBHS, in collaboration with the Family Health Division (FHD) of the MOHSW, has continued to build the capacity of the various MNCH program teams of the MOHSW. Since the MOHSW priority was quality improvement in MNCH services, RBHS has provided technical support to the FHD/MOHSW in strengthening quality assurance and improvement systems as well as individual capacity building of care providers to deliver quality MNCH services. Some of these activities such as the modification of the integrated management of neonatal and child illness (IMNCI) training course from 11 days to 6 days are described below.

Development of QI standards and supportive supervision are described more generally under IR2.

Activities and results

Strengthening MNCH Services

In an effort to increase access to and utilization of MNCH services, RBHS supported the MOHSW to develop the document for the process of conducting the **maternal and neonatal audits**. Maternal and newborn audits were conducted in the FARA counties of Bong, Nimba and Lofa starting in January 2013.

RBHS studied the results of the first six months of maternal and neonatal death reporting. Using the estimated maternal mortality of 994 per 100,000 live births the number of expected maternal deaths in Bong, Nimba and Lofa are 166, 229 and 137 respectively⁴. The district health information system (DHIS) reported maternal deaths for the first six months of 2013 for Bong and Nimba and Lofa to be 15, 15 and 12 respectively. These figures show that less than 10% of estimated annual maternal deaths have been reported in the first six months of 2013.

Based on an estimated neonatal mortality rate of 27/1000 live births, the expected number of neonatal deaths in Bong, Nimba and Lofa are 450, 623 and 373 respectively⁵. The percentage of neonatal deaths reported constituted 8%, 3% and 5% of all expected deaths in Bong, Nimba and Lofa respectively. The data clearly shows under-reporting of neonatal deaths in DHIS.

Over 90% of the reported maternal deaths have been audited in Bong and Lofa. But in Nimba, only 40% of deaths were audited. As expected, postpartum hemorrhage (PPH) was reported as the leading cause of maternal mortality. Asphyxia was found to be the leading cause of newborn deaths in these counties. Audits of neonatal deaths have not been completed in Nimba and Lofa, and only 2 cases were audited in Bong.

RBHS in collaboration with MOHSW/FHD completed the development of **Referral Protocols for MNCH** which will serve as a guide for the referral system across the country. The stakeholders from the Reproductive Health Technical Committee (RHTC) agreed on the standard protocols and the process of referral from the community level upward. The assessment and initial management, including drugs to be administered, as well as interim management procedures, were outlined. The referral included a bi-directional process with a return to the referring facility. The MOHSW has opted to use the referral protocol for MNCH as an example for all other referrals. Plans for dissemination will be developed before the end of 2013.

In addition, RBHS provided technical support for the **adaptation of the 6 day IMNCI training course** for use at the county level in step-down training. RBHS, in collaboration

⁴ Liberia Demographic and Health Survey (LDHS), 2007.

⁵ A Promise Renewed, 2012

with MOHSW and FHD developed newborn policies and protocols which include chlorhexidine for use of cord care and kangaroo mother care. In continuation of efforts to increasing access to and utilization of emergency obstetric and neonatal care (EmONC), RBHS completed the provision of specialized EmONC equipment as well as training of staff in the use and maintenance for Sinje newly completed EmONC center.

Progress has been made in RBHS-FARA counties Bong, Nimba and Lofa in ensuring that women increasingly deliver at a facility with a skilled birthing attendant (SBA). Figure 1 shows that 61% of estimated deliveries occurred in health facility, a 10% increase from the previous year. Each county has made progress from 2012.

Figure 1: Percentage of deliveries in facilities assisted by skilled birthing attendants (by FARA county and year)

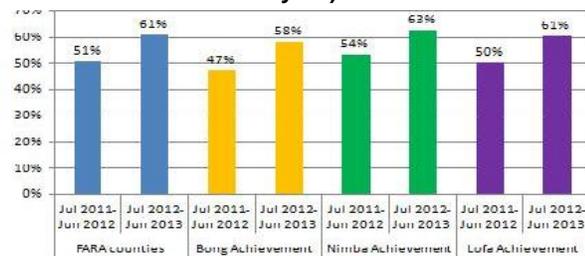
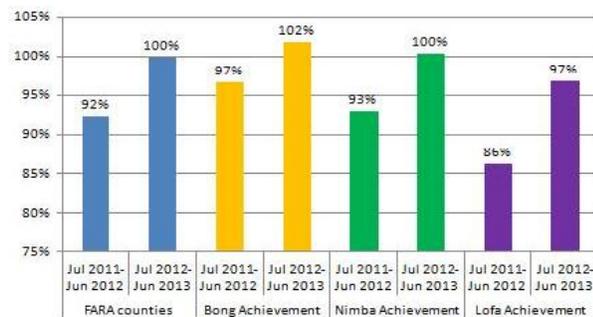


Figure 2 depicts immunization coverage for the third dose of Penta. The coverage is high, and has improved from 2012. According to the data, the majority of children <1 year received the third dose of the Penta 3 vaccination.

Figure 2: Percentage of children <1 yr vaccinated with Penta 3 (by FARA county and year)



Preliminary data from the 2013 LDHS found Penta 3 coverage in Bong at 62.1%, in Lofa at 80.9%, and in Nimba at 68.5%. The differences may be partially explained by the fact that the LDHS data are based on vaccinations given in 2011-12.

During fiscal year 2012-2013, FARA partners in collaboration with the FHD, aiming to increase access to and utilization of MNCH services at the community level, adapted the **Home Based MNC training course** and added provision of care at the household level, including chlorhexidine for cord care and kangaroo mother care.

RBHS has also partnered with the Liberian Agricultural Upgrading Nutrition and Child Health (LAUNCH) program and UNICEF to support the MOHSW in the scaling up of the **Essential Nutrition Actions (ENA) intervention package** in Liberia. The partners supported a JSI consultant from Ethiopia to come to Liberia and conduct a series of ENA trainings over three weeks in August 2013.

BCC and Advocacy

In October 2012, the MOHSW appointed Madame Miatta H. Fahnbulleh as **Good Will Ambassador** for the reduction of maternal and newborn mortality in Liberia. RBHS



GWA Miatta H. Fahnbulleh

provided assistance in developing the ambassador's plan of action including county advocacy meetings across the country. To begin these campaigns, RBHS provided technical and financial support for these advocacy meetings, supporting the reduction of maternal and newborn mortality in Lofa, Nimba and Bong Counties by the Good Will Ambassador (GWA) in collaboration with MOHSW/FHD and the county health teams (CHTs). On 25-28 February 2013, a total of 638 individuals including county officials, district health officers, facility staff, community stakeholders, commissioners, paramount and town chiefs, TTMs, and local women and youth leaders participated in the meetings in Lofa. In continuation of this process, similar meetings were conducted in Nimba and Bong Counties.

In May 2013, twenty-four health professionals participated in four day training on the development of communication materials and messages targeting MNCH. Participants were mainly district level environmental health technicians, drawn from Bong, Lofa and Nimba counties. A joint team of Maternal Newborn and Child Health (MNCH) experts from RBHS and the Bong CHSWT presented a situation analysis on efforts to prevent deaths of pregnant women and newborns in Liberia. Outcomes from these interactive sessions held at the Phebe Compound were pretested zero drafts of audio messages and printed materials based on MNHC intervention themes. Primary audiences were identified as pregnant women and mothers with children under 5, trained traditional midwives (TTMs), trained birthing assistants (TBAs) and certified midwives (CMs). Husbands and other caregivers were identified as secondary audiences.

Messages and materials focused on four themes: (1) Newborn care (immediate recognition of danger signs and prompt referral); (2) Recognition of danger signs in pregnancy, labor and delivery; (3) Importance and benefits of ante-natal care (ANC) visits; and (4) Benefits of facility delivery. The materials and messages are will be produced and pretested. Airing and dissemination of the materials and messages will begin during the first quarter of 2014.

Successes, challenges and constraints, and lessons learned

Advocacy meetings with the Goodwill Ambassador for Maternal and Child Health

The greatest success has been the results of the advocacy meetings with the Goodwill Ambassador. Community leaders have stepped up in supporting efforts to reduce maternal and neonatal mortality. Some of the interventions include the building of maternity waiting homes, mapping of pregnant women in all catchment communities, and airing of MNCH messages (including those on family planning) on local radio stations in the language of the community. Others approaches include imposing a fine of 1,500 LD on husbands when their wives deliver at home, and improved follow-up by TTMs of pregnant women in the weeks preceding delivery.

In addition, District Good Will Ambassadors were selected. These individuals will work with general community health volunteers (gCHVs), TTMs and District commissioners to monitor health affairs at the community level. This initiative has resulted in significant changes in service delivery in Lofa, as community leaders developed strategies in increasing access to and utilization of these services.

Other successes include the provision of specialized EmONC equipment at Sinji Health Center, which has enabled the facility to better respond to obstetrical emergencies, and the adaptation of the home-based maternal, neonatal and child health care (HBMNC) module, aiding household members in understanding the importance of early referral and recognition of danger signs.

Many challenges and constraints remain, including the following:

- Competing priorities and limited attention to MNCH patients by care providers cause delays in the delivery of services
- Lack of adequate and quality staff at the facility level to ensure the effective implementation of MNCH services
- Scaling up the audit process for each maternal and neonatal death will require additional time, funding and skilled human resources

Highlights of planned activities for the extension period

- Provide technical support to the FHD to print and disseminate new referral system job aids and the IMNCI training materials, as well as conduct a refresher training for masters trainers
- Provide TA and monitor the roll out of trainings for maternal and newborn audits at facilities and community trainings
- Support the MOHSW in scaling up the use of chlorhexidine for cord care and the use of misoprostol for PPH prevention at the community level
- Ensure the airing of MNCH BCC messages including those promoting the use of evidence-based practices, namely the use chlorhexidine for cord care as well as kangaroo mother care
- Train 150 health workers, 50 per county, including county trainers who will facilitate the roll out of essential nutrition actions (ENA) in order to address Liberia's high stunting rate
- Assist district health officers (DHOs) and other RH supervisors to develop a roll out plan for maternal and newborn audits
- Provide TA to county level staff to develop roll out plan for training on an integrated HBMNC package which includes chlorhexidine for cord care and kangaroo mother care at the community level
- Continue to work with MOHSW/FHD and the Good Will Ambassador surrounding the continuation of follow-up visits and county level advocacy meetings on the reduction of maternal and newborn mortality
- Examine the possibility of scaling up intensive community case management (iCCM) in the FARA counties (see further details under section 2.1)

Intervention 1.2: Increase uptake of three critical malaria interventions: treatment with ACT, preventive treatment of pregnant women, and sleeping under ITNs

Malaria is the major cause of morbidity and mortality in Liberia accounting for an estimated 33% of all in-patient deaths and 41% of deaths among children under five⁶. In an effort to reduce malaria burden in Liberia, RBHS is working to build the capacity of the central National Malaria Control Program (NMCP) as well as the FARA CHSWTs to increase the uptake of three malaria interventions: (1) sleeping under insecticide-treated nets (ITNs); (2) malaria prevention in pregnant women; and (3) treatment with Artemisinin-based combination therapy (ACT). RBHS malaria activities for the project were designed in close consultation with the NMCP and are closely linked to the priorities outlined in the Malaria Operational Plan (MOP) of the President's Malaria Initiative (PMI). These capacity building activities are implemented in a collaborative approach by NMCP, the county health teams, implementing partners, and RBHS.

Activities and results

Provided technical assistance to increase the use of ITNs

RBHS worked with CHSWTs during supportive supervision visits to improve the quality of health messages disseminated at the health facility, specifically on the use of ITNs and malaria case management. RBHS also provided the National Malaria Control Program with more than 5,000 leaflets outlining how to use the ITNs during the mass ITN distributions. RBHS also provided 3,000 ITN posters to the program for distribution during the 2012 National Health Fair in Barnesville.

Recently, NMCP delivered 7,175 ITNs in Lofa, 10,625 ITNs in Nimba and 10,225 ITNs in Bong; a total of 28,025 to the local health facilities. The health facility staff has since been distributing the nets to pregnant women during ANC visits. RBHS is closely monitoring this new mechanism for ITN distribution.

RBHS supported the airing of radio messages on ITN use, called "Take Cover." This campaign ran over a period of three months; from 15 June - 15 September 2013. A total of 9 partner radio stations were contracted including 2 Monrovia-based station and 7 community-based partner stations in Bong, Lofa and Nimba counties. The radio campaign featured 4 pre-recorded radio messages in both English and 10 local languages. It ran over a three-month period and was broadcasted on all 9 partner stations. During the reporting period, messages were aired for a total of 64.8 playing hours.

Supported the CHSWTs to continue increased coverage of IPT

RBHS joined in quarterly supportive supervision visits to ensure that intermittent preventive treatment of malaria in pregnancy (IPT) doses were administered as scheduled and encouraged outreach activities by CMs to follow up with pregnant women. RBHS

⁶ Liberia Malaria Indicator Survey. 2011

worked with both CHSWTs and implementing partners (IPs) to ensure the availability of sulfadiazine and pyrimethamine (SP) at health facilities. For the past two quarters no stock outs of SP at the health facility level have been reported.

In June 2013, WHO issued revised guidelines for the administration of IPT. Professor Bill Brieger from John Hopkins University (Baltimore) assisted the MOHSW in adapting these guidelines to the Liberian context during a stakeholder's forum, organized by the MOHSW and RBHS. Prof. Brieger met with the LMDC and relevant authorities at MOHSW during two separate meetings. The revised IPT guidelines were validated on November 1, 2013.

The planned IPT campaign could not be implemented due to the late execution and validation of the formative research for the NMCP communication strategy. These research activities were needed to identify gaps in the campaign which would then be addressed by messaging.

Provided technical assistance to support capacity development for accurate and prompt treatment of malaria

RBHS provided technical assistance to CHSWTs and NMCP for the training of 137 clinicians in malaria case management in Lofa and Nimba counties, approximately 1 per health facility. In collaboration with IPs, RBHS also supported the Nimba count CHSWT to supply ACT and rapid diagnostic tests (RDTs) to 62 health facilities.

RBHS conducted a mass media campaign using radio messaging on malaria case management. The campaign lasted for six months (October 2012 - April 2013). Airing of the case management messages took place on various Monrovia-based and community-based radio stations. During the reporting period, messages were aired for a total of 129.6 playing hours.

RBHS continues to collaborate with NMCP, the National Health Promotion Department (NHPD) and Strengthening Pharmaceutical Systems (SPS) to finalize the message development process to increase access to ACT through a pilot project utilizing the private sector, including medicine stores and pharmacies. According to the 2011 LMIS report, about 49% of the populations seeking treatment for malaria in Liberia go to medicine shops. However, there are concerns that in some cases, people are treated with sub-standard drugs. To date, NMCP in collaboration with partners and with support from the President's Malaria Initiative (PMI) has procured a large quantity of quality malaria drugs for private sector distribution.

RBHS sponsored 2 MOHSW staff (the NMCP BCC focal person and Director of Health Promotion) and 1 RBHS staff to participate in the PMI/BCC conference held in Ethiopia in September 2013. The objectives of the conference were as follows: (1) to share updates on current activities and PMI approaches for BCC in various country contexts surrounding malaria epidemiology and program/partner capacity; (2) to identify and discuss best practices and lessons learned from PMI/BCC programs and draw from these lessons in planning future activities.

RBH developed an iCCM position paper in an effort to scale up iCCM in the FARA counties. This position paper was used by NMCP and partners to develop a concept paper for the iCCM scale-up for the upcoming Global Fund grant for malaria (see also under 2.1).

RBHS has also worked with the CHSWT to supply drugs to gCHVs for iCCM. At the community level, 350 gCHVs were trained to provide malaria prevention messages through the use of Community Health Education Skills Toolkit (CHEST).

Support to the United Against Malaria (UAM) Campaign

The UAM campaign was initiated during the 2010 World Cup in South Africa. The UAM-Liberian team (NMCP, RBHS and ALMA) has coordinated the construction of two billboards in Paynesville city at Duport Road Junction and SKD sports complex. One was funded through RBHS and the other through the President of Liberia’s Office (ALMA). The NMCP & RBHS collaborated with the Ministry of Youth & Sports (MoYS) and the Liberia Football Association (LFA) during the county meet, an annual sporting event, to distribute over 5,000 malaria fact sheets, posters and other educational materials.



President Ellen Johnson receives an UAM award during a soccer match at the SKD stadium

Results

Last year, an estimated 51% of pregnant women were given two doses of IPT in the 3 FARA counties (see Table 1 and Figure 3). Although the indicator has increased from 47% in previous year, the increase is not high enough to have sufficient impact. Possible explanations include stock outs of SP and lack of follow-up of pregnant women. This problem needs special attention in Nimba where IPT2 decreased from 53% to 52%.

A total of 91% (183,405) of children under the age of 5 years who were diagnosed for malaria based on RDT and microscopy findings were treated using ACT drugs (see Table 1 and Figure 4). ACT is the drug of choice in treating malaria, except in case of severe malaria. This indicator has increased from 87% overall in previous year, but it decreased in Bong from 66% to 59% and in Lofa from 75% to 70%. This is partially explained by transition from RBHS managed PBCs to MOHSW managed contracts. Treatment of children under the age of 5 years within 24 hours remains low, at 33% (see Table 1).

Table 1: Malaria Results for FARA counties

Indicators	July 2012 - June 2013
Pregnant women provided with IPT2	<u>51% (30,257)</u>
Children <5 treated with ACTs	<u>91% (183,405)</u>
Children <5 treated for malaria within 24 hours of onset of fever	<u>33% (59,155)</u>

Figure 3: Percentage of pregnant women who received IPT2 (by FARA county and year)

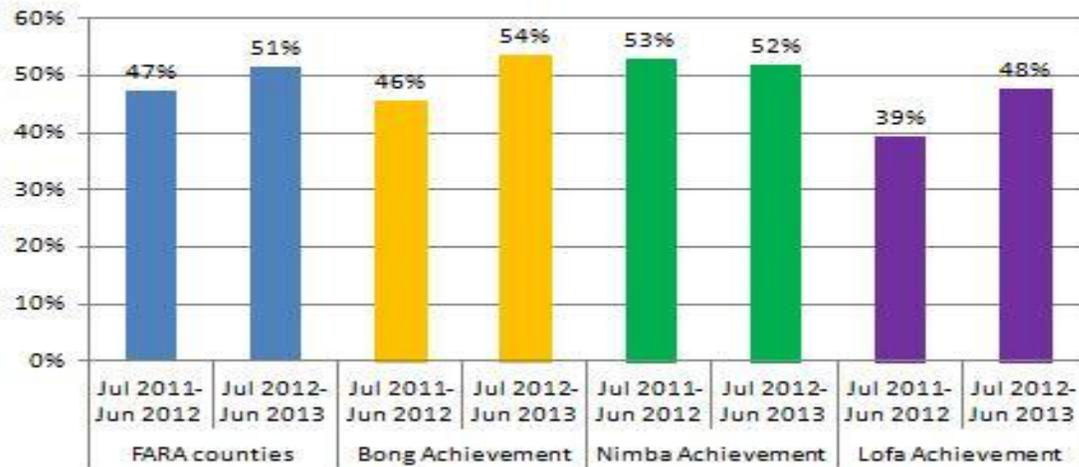
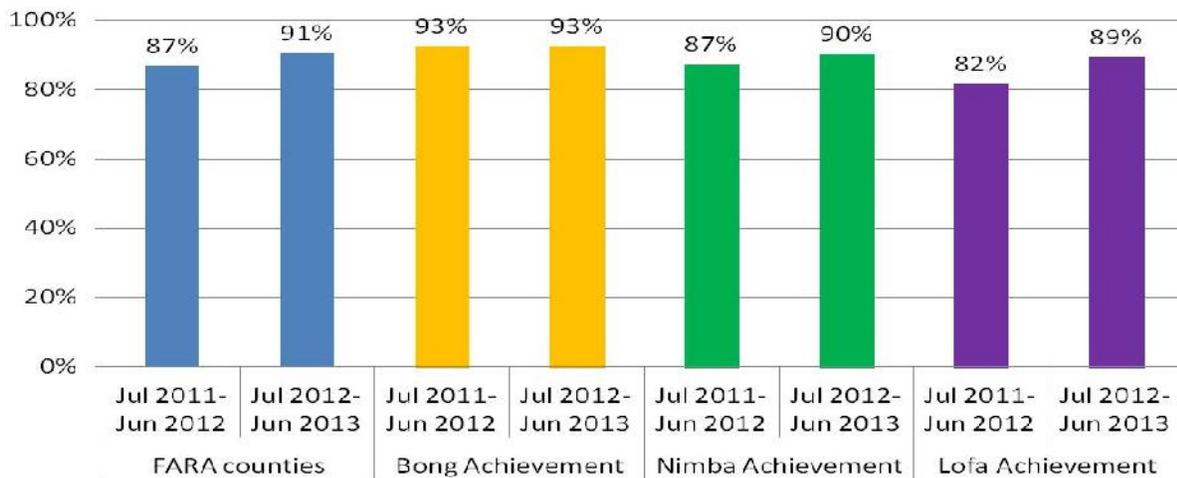


Figure 4: Percentage of children <5 yrs with malaria treated with ACT (by FARA county and year)



Successes, challenges and constraints, lessons learned

The distribution of ITNs during ANC visits in the FARA counties is an excellent example of integrated service delivery and use of opportunistic approaches to administer evidence-based interventions during each client visit to a health facility. Another example is the integration of malaria prevention activities with sporting events. RBHS provided support to set up this collaboration on malaria prevention between NMCP, the Health Promotion Division of the MOHSW, and the Ministry of Youth and Sports during the national county meet in January 2013.

Though there were many successes during this reporting period, the following challenges and constraints remain:

- Problems implementing activities according to schedule due to competing priorities imposed by different donors
- Difficulties in collaboration with PLAN International, one of the Principal Recipients for the Global Fund malaria grant
- A slow start in adapting the new WHO IPT guidelines

An important lesson learned was that collaboration on complex interventions such as the malaria program can only work if all partners put the interest of those they serve first.

Highlights of planned activities for the extension period

- Collaborate with NMCP and NHPD to update ACT, IPT, and ITN messages for mass media airing and the CHEST kit
- Support CHSWT in collaboration with NMCP to conduct a TOT for service providers on the IPT revised guidelines
- Continue to monitor IPT2 coverage as a national indicator, as well as a performance indicator in performance-based contracts.
- Measure the impact of the BCC campaigns during the end-of-project household survey
- Examine the possibility of scaling up iCCM in the FARA counties (see details under Intervention 2.1)

Intervention 1.3: Increase access to quality HIV/AIDS services, with an emphasis on prevention

Activities and Results

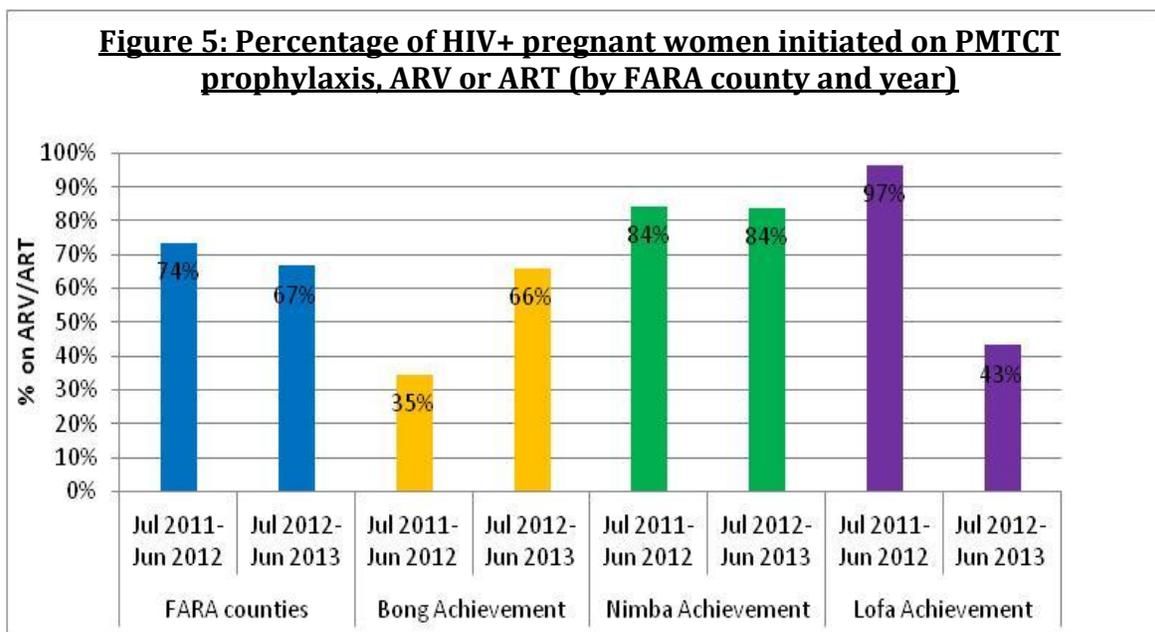
During the period under review, RBHS continued its collaboration with the National AIDS Control program (NACP/MOHSW) building its capacity, as well as that of the IPs for the implementation of various activities as planned in the Year 5 work plan. RBHS has

provided technical assistance to the NACP/MOHSW whenever needed and participated in the regular monthly Partners Meeting at NACP.

PMTCT activities

Prevention of mother to child transmission (PMTCT) treatment sites established by CHSWTs with technical support by RBHS are closely monitored, and provided with drugs and supplies on a monthly basis through the CHSWT and partners. Referral centers for HIV/AIDS are fully monitored by NACP and implementing partners in collaboration with MOHSW/FHD.

Figure 5 below shows the percentage of HIV+ pregnant women who were initiated on PMTCT prophylaxis by FARA counties. While Nimba maintains a high achievement of 84% and Bong nearly doubled its achievement from 35% to 66%, the situation in Lofa must be further investigated to explain the drop in achievement from 97% to 43%. It is possible that this is a data quality issue.



Supportive supervision

RBHS and the NACP also conducted supportive supervision visits to health facilities in RBHS supported counties providing HIV services. Mentoring and on-site coaching was initiated specifically on the revised HIV testing protocol, ARV regimen administration and effective counseling skills.

Public-private partnerships on HIV/AIDS prevention

In early October 2012, RBHS supported the three CHSWTs (Bong, Lofa & Nimba) and implementing partners (Africare and IRC) to launch the establishment of prevention

information outlets as part of the STI/HIV/AIDS prevention activities. The outlets are intended to promote safer sex among adolescents by making condoms accessible within at least one catchment community of a health facility. A one day training was conducted for 93 selected community-based business set-ups. Highlights of the sessions included brainstorming discussions on the transmission and prevention of STI/HIV. Each of the 155 participants performed a return demonstration of proper condom use. Ninety-three (93) HIV/AIDS prevention outlets were established within Bong (30), Lofa (32), and Nimba (31) counties.

Journey of Hope Kit for promoting participatory HIV prevention activities among youth

RBHS supported the MOHSW through the NACP and in collaboration with the National Health Promotion Division (NHPD) and the Community Health Services Department (CHSD) to conduct the Journey of Hope Kit Training of Trainers (TOT) for the NACP and its community-based organization (CBO) partners. This was part of a process to institutionalize the use of the Journey of Hope Kit by the NACP in order to promote open discussion with youth about sexual behavior issues and STI/HIV and AIDS prevention in Liberia. 27 individuals from NACP and 17 community-based officers (CBOs) from 10 counties participated in this training.

World AIDS Day

RBHS participated in the official program of World AIDS Day on December 1, 2012 at the SKD Sports Complex. The day was celebrated under the global theme: "Getting To Zero (Zero new HIV infections, Zero discrimination & Zero AIDS related deaths)," The National theme was "Eliminating Mother to Child Transmission in Liberia. Yes we can". The program was attended by an array of government officials, UN agencies, the Armed Forces of Liberia, local and international NGOs, Liberian musical artists, students and people living with HIV/AIDS.

Successes, challenges and constraints, and lessons learned

A remarkable success was the Journey of Hope training organized by RBHS, which succeeded in building the capacity of NACP technical staff and their community-based partners in effectively passing on learned skills to their colleagues, who in turn will conduct community sessions on the prevention of STIs and HIV/AIDS. The "*Narrow Bridge and Fleet of Hope*" promotes participatory HIV prevention activities among youth, and other community members, in an engaging and dynamic behavior change methodology. The participants described the TOT workshop as "extremely practical and demonstrative."

The lack of funds at NACP during the first part of the year resulted in major delays in implementation of activities in the operational plan. Another serious challenge was the very limited coordination between the MOHSW and the Ministry of Education (MOE). Finally, the resignation of the RBHS HIV/AIDS advisor in February 2013 created a gap in the full implementation of school health activities focused on HIV and AIDS.

Highlights of planned activities during the extension period

- Strengthening integrated PMTCT activities as a collaboration between NACP and FHD
- Draft TOR for the HIV/AIDS school health program
- Provide technical assistance to NACP and CHTs for HIV/AIDS program management

Intervention 1.4: Increase access to comprehensive family planning and reproductive health (RH) services

Activities and results

Supporting Ministry of Health and County Health Teams

RBHS has continued to strengthen FHD in collaboration with FARA partners to increase access to and utilization of family planning services. During this reporting period, RBHS supported the MOHSW to update the FP Commodity Strategy, validated a set of manuals and job aids to support FP community-based delivery (CBD) programming and adapted service providers' training manuals for adolescent sexual and reproductive health (ASRH). RBHS in collaboration with FHD also provided orientation on healthy timing and spacing of pregnancy (HTSP) and conducted a mapping of community-based FP services.

RBHS also distributed 120 sets of job aids to the three counties to support quality of care in FP service provision and support step-down trainings. The step-down trainings, covering a wide range of FP methods including long term FP methods have increased the number of trained FP service providers from 109 to 218. RBHS also conducted trainings on adherence to FP Statutory Policies. In addition, RBHS through its county teams and county RH teams have continued to provide quarterly supportive supervision.

Contraceptive Days

District contraceptive days were born as a result of the World Contraceptive Day (WCD) celebration on 26 September 2011. Annually, WCD is celebrated to raise awareness and advocate for universal access to family planning. Although the main aim of WCD is advocating for family planning access and utilization, RBHS included a service delivery aspect to the commemoration ceremony by setting up a family planning fair. During the family planning fair, information and services are available for those who choose to use family planning.

Because many people turned out for FP services on that first celebration of WCD, RBHS determined that the use of regular contraceptive days were a good strategy for increasing access to and utilization of family planning, especially among young people. Therefore, RBHS extended contraceptive days to county capitals in 2012. By 2013, RBHS in collaboration with the county health teams in Bong, Lofa and Nimba conducted district contraceptive days (DCDs) in 19 out of 21 health districts in Bong, Lofa and Nimba counties. Table 2 below shows contraceptive methods provided during DCDs in 2013. With these results in combination with previous results, contraceptive days as a strategy for increasing access to and utilization of family planning was accepted and presented in a

poster session at the Third International Conference on Family Planning in Addis Ababa, Ethiopia.

Table 2: FP Methods distributed on contraceptive days in 2013

County	FP Method and Total Clients					
	Implant (Jadelle)	Depo Provera	IUD	OCPs	F & M Condom (number of clients)	Cycle Beads
Bong	651	605	1	627	1600	6
Lofa	794	629	3	818	18,535	30
Nimba	1,479	578	0	817	11,903	5
Total	2,924	1,812	4	2,262	32,038	41



A group counseling session for women desiring FP services



Contraceptive Day Theme

Community-based FP services and BCC

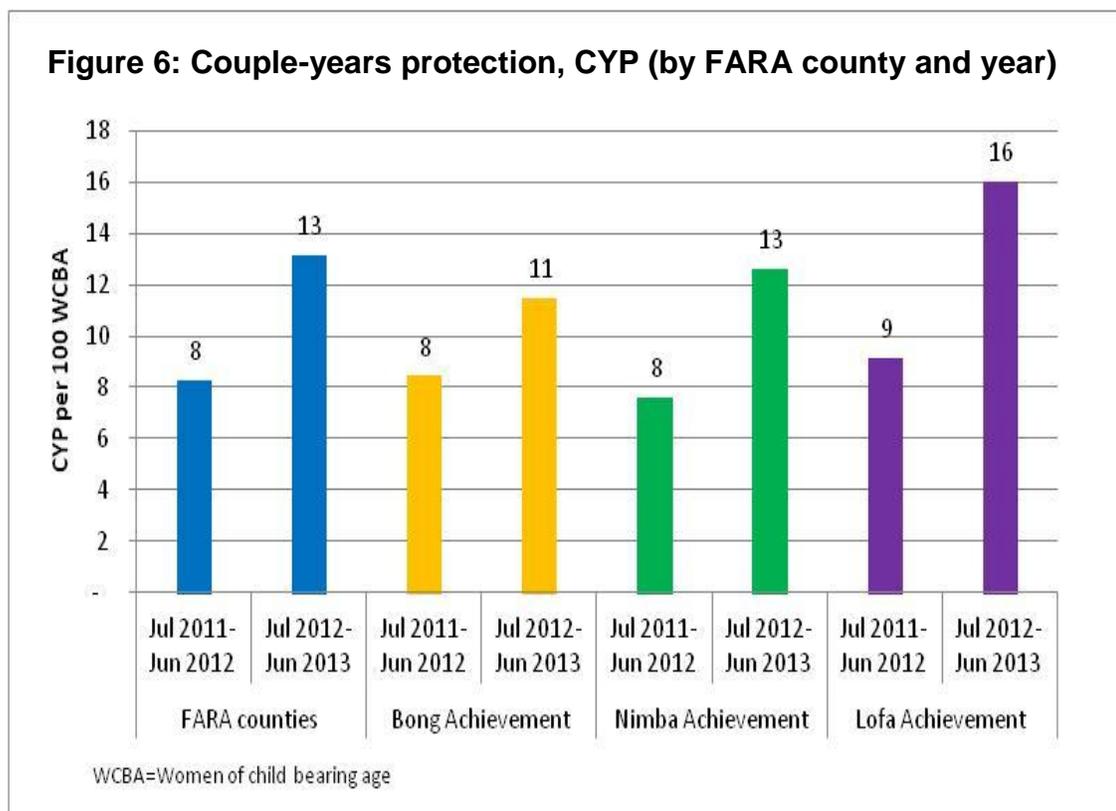
In addition to service delivery at the facility level, RBHS supported the validation of community-based distribution (CBD) training manuals and job aids. In 2013, CurAmerica, BRAC, PMU and IRC used these materials to train community health volunteers (CHVs) who are delivering FP services in various communities in Montserrado, Lofa and Bong counties. Related to increasing access to FP services among adolescents, RBHS continued to air the radio slogan “Baby by Choice, Not by Chance.”

Market Contraceptive Project

Although contraceptive days have been a great success at the county level, the Market Contraceptive Project has not seen nearly as much success. However, by the time of this report submission, all three counties of Bong, Lofa and Nimba will have committed to

implementing Market Contraceptive Projects in the extension year. The three county teams are considering diverse approaches to accommodate the individual needs of each county. In Lofa, for example, the county intends to work with young people to create awareness, followed by service delivery by a professional health care provider on the first Friday of the month. The extension year should see an improved Market Contraceptive Project in the counties.

As a result of all these activities, use of modern family planning methods has increased substantially in the 3 FARA counties as demonstrated by Figure 6.



Successes, challenges, constraints and lessons learned

The introduction of contraceptive days has been one of the main contributors to the increased use of contraceptive methods in the FARA counties. Contraceptive days take FP services to the clients breaking various barriers to FP uptake. Other factors for increased CYP over the last twelve months can be attributed to availability of trained staff to provide a wide range of FP methods. Delivering FP services during the National County Sports meeting contributed to over 200 women utilizing contraceptive services.

During the period under review, the primary challenge has been the availability of contraceptive commodities at the point of service delivery. At the time of this report

writing, CBD activities in Lofa County are on hold because of limited commodity supply in the county. In the face of these challenges, RBHS learned a few lessons in relation to implementing contraceptive days:

- The most suitable time for district contraceptive days is before the farming season, late December and January-February.
- Integrating FP service delivery with other interventions such as immunization and nutrition yield positive results at no or little additional cost
- Planning contraceptive days for more than one day results in reaching greater numbers of women who are in need of access to FP services

Highlight of planned activities for the extension period

- Institutionalize Contraceptive Days (CD) at National, County and District level of MOHSW
- Disseminate community-based FP materials
- Support CHSWT to strengthen FP Center Of Excellence (COE) in Bong and establish centers in Lofa and Nimba
- Conduct operations research on family planning practices and experiences with long-term methods (e.g., Jadelle)
- Integrate FP into immunization, nutrition and other primary health care services

Intervention 1.5: Infrastructural work including environmental interventions and pharmaceutical procurement

Activities and results

Finalization of Physical Renovations

Substantial progress was made on most of the planned facility renovations during the 13 month project year. Six Lofa clinic renovations were completed and three of six Nimba clinic/health center renovations were completed. The remaining three Nimba renovations will be completed by the end of 2013. USAID approval to construct Barkedu clinic in Lofa was received in August and the contractor began work in October. Renovations at the Esther Bacon School of Nursing and Midwifery (EBSNM) including small projects (EmONC OR, maternity ward, staff houses, and accessible ramps), classroom building and water project were completed and an opening ceremony was held, attended by USAID and Deputy Minister of Health. The EBSNM Electrical Project completion was delayed and an assessment and rebid to correct inadequacies of the work are underway. The renovation of the TNIMA kitchen was completed and turned over to JFK Hospital.

As for the water supply to the renovated facilities, after months of research and procurement attempts, RBHS was unable to find a reliable borehole contractor. In April 2013 RBHS began discussions with UNICEF and the Ministry of Public Works (MPW) to

collaborate to drill a borehole at Fishtown Health Center and Fishtown Hospital in River Gee County. This produced successful wells in June 2013. The MPW drilling rig could not access River Gbey or Jayproken because of impassable road conditions and bridges. MPW reported that Jimmyville's location on a hill was unsuitable for drilling a borehole. With the well test report information, RBHS began procurement for reliable, quality submersible pumps. Community Housing Foundation (CHF) was unsuccessful in drilling 3 wells at RBHS support health facilities in Lofa and Nimba, and discontinued this activity.

In regard to solar power installations, coordination between RBHS, Merlin and Infrastructure Unit (IU) was ongoing throughout the year. The last 5 solar power systems at RBHS facilities in Nimba were installed during October. The IU and RBHS agree that solar panels should not be installed on health facilities roofs to avoid severe interior damage due to roof leaks where solar panels are normally installed. RBHS designed and purchased solar panel supports for the 5 Nimba facilities and suggested that the Merlin project implement the same action. Merlin began installing solar power systems in late 2012 and all the previously supported RBHS facilities had solar power systems installed by the end of the year. EPI was informed that all the original RBHS facilities now have solar refrigerators installed.

Capacity building of the Infrastructure Unit

RBHS continued to support the MOHSW in planning the construction of a Central NDS Pharmaceutical Warehouse. RBHS presented a comparison of two studies on the NDS warehouse in December 2012 resulting in agreement by the MOHSW, USAID and Global Fund to proceed with the design and construction of a 3000m² central drug warehouse. A 15 acre site was found and surveyed and a 25 year \$1 per year lease signed between MOHSW and the landlord, National Investment Commission (NIC).

RBHS sub-contracted with Lamda Consult, a Ghanaian architectural firm, to assist in preparing design build drawings and specifications. A study tour to Ghana with MOHSW, RBHS, Deliver and National Drug Service (NDS) representatives took place in April that aided the team in deciding and agreeing on the type of construction to be used in Liberia. Design Build drawings were approved in October 2013 after many reviews by RBHS, NDS, MOHSW, GF, and USAID and stakeholder input at a presentation organized for their review earlier. RBHS will finalize the specifications drafted by the subcontractor in November 2013.

RBHS prepared and submitted an Initial Environmental Examination and Environmental Report to USAID and the Liberian EPA on January 2012. A Liberian EPA permit was received in June 2012. It was not until May 2013 that USAID reported that further environmental review would be needed and would be conducted by GEMS, a global USAID environmental contractor. RBHS undertook soil and water testing in August as it indicted in its IEE and EPA permit application. Results were received on October 30 2013 on all tests except hydrocarbons and BTEX which could not be tested in Liberia. The GEMS contractor reported that the delay in testing the hydrocarbons and BTEX would invalidate the results.

Discussions began with the MOHSW Procurement Department in May 2013 on procedures to qualify bidders, release the invitations to bid announcement, and bid documents. Final agreement on releasing a public announcement for bidder prequalification was not achieved as of October 31, but expected imminently. Release of the RFP to prequalified bidders would also be delayed until the environmental studies were complete. A third draft of a warehouse MOU between MOHSW, USAID and the Global Fund including payment terms was prepared, at the request of USAID and Global Fund.

RBHS supported the Infrastructure Unit to finalize the *Infrastructure Policy*. A validation workshop was conducted in February to review, discuss and validate the draft MOHSW Infrastructure Policy which had been in draft since 2010. Resulting revisions were made and submitted to and approved by the program coordination team (PCT) in March. Final revisions were made and presented to the Minister in October. The Deputy Minister approved it for final graphic design and layout in October. Printing is scheduled before the end of the calendar year.

AutoCAD and RISD structural design software were purchased and loaded on computers in January 2013. AutoCAD training was conducted for 70 hours over a six week period in May - June 2013. The results of the training were mixed and a final evaluation suggested changes be made before offering it to more IU staff. A trainer for the RISD structural design software could not be located in Liberia or West Africa, and RBHS continues to search for an international trainer to conduct the training in project Year 6.

RBHS supported the IU in developing maintenance plans and budgets. RBHS and IU, working with the MOHSW M&E and HMIS departments, developed an inventory questionnaire in October 2012. Pilot testing it in Lofa County was delayed until October 2013 in order to convert it to a web-based digital system to be uploaded into the MOHSW digital data base. Four teams deployed for 11 days to collect the information using paper surveys and handheld PDAs. The results were reviewed and changes made to the inventory instrument in October. The plan is to collect the inventory information in Bong and Nimba during the extension year and to set up the maintenance database in the Central MOHSW and the counties.

As for the design of the Redemption Pediatric Ward, the preparation of construction documents, subcontracted to MASS Design Group, were completed and turned over to MOHSW.

An RFP was issued in September 2012 to prepare buildings standards for MOHSW facilities. A subcontract was signed with MASS Design Group as a result of this procurement in March 2013. Work began in April with in-depth research into the Liberian climate and current design and construction conditions. Two progress drafts were prepared and reviewed, and a final draft was presented at a validation workshop attended by over 50 stakeholders in October 2013. Final revisions began after the workshop and will be completed before the end of the calendar year.

The activity to support the infrastructure unit organizational development was delayed pending completion of other ongoing and delayed activities (noted above) being implemented with the IU.

Other activities not in the original Year 5 work plan

- Support and coordination of the Sinje EmONC with the DOD contractor to ensure the electrical system and the design of the building met the medical care delivery needs and installation of a surgical light procured by RBHS for 6 EmONC centers in Liberia. The EmONC addition was completed and turned over to the CHT in February.
- Coordinating with MOHSW and River Gee CHT and contracting to begin the installation of a surgical light at the newly constructed River Gee Hospital. MOHSW has also requested the surgical light installed by RBHS during the Fishtown Health Center renovation in 2011 be relocated to the Fishtown Hospital.
- RBHS assessed an existing residence at Phebe Hospital for use as a field office for renovation and solicited bids from 3 contractors. The project ultimately was cancelled, because the high investment cost close to the end of the project .
- Design, procurement and contracting for the installation of a solar/battery backup system for MOHSW computer server to allow longer access to the MOHSW server from off site to allow users to have access to the MOHSW database, especially CHTs, outside the time when the power supply is not available.
- Renovation of NMCP offices and conference room for USAID and CDC advisors.
- Assessment of the need for renovation and equipment of the CB Dunbar/ Bong County Family Planning Center of Excellence

Successes, challenges and constraints, and lessons learned

Five major procurements were undertaken which completed major planned infrastructure procurements. In total, thirteen building renovations were successfully completed during the year. The only major problem encountered was the EBSNM electrical system rehabilitation. An outside electrical engineering firm was hired to identify the problem, and recommend corrective measures. Their findings were that the materials designed and installed were useable, but both were incomplete. An RFP to correct the problem was issued and a contract to implement the corrections will be signed and started before the end of calendar year 2013. This highlighted the overarching lack of locally qualified engineers and contractors, which will continue for years until Liberian contractors are professionally trained and achieve competency through hands-on experience.

The supply of clean, sustainable, year-round water sources requires, in many situations, the drilling of boreholes. RBHS has been able to drill 4 successful boreholes out of 7 attempted, which outside Liberia is considered a low success rate. CHF was contracted for 3 additional boreholes in Lofa, all of which were unsuccessful. Once again this highlighted the current lack of technically capable and qualified companies and individuals. RBHS has also, unfortunately, demonstrated how the lack of infrastructure (roads and bridges in this case) is a major obstacle to providing year round water to health clinics through its inability to drill boreholes at Japporcken and River Gbey in River Gee, after more than 2 years of trying.

The lack of skilled local professional trainers also delayed and compromised the delivery of skills training on the AutoCAD and RISA structural engineering software.

RBHS worked successfully with the IU, M&E/HMIS, and Curative Services divisions to develop a facilities inventory instrument as the first step of developing a building maintenance program. Implementing this effort was a challenge due to a six month delay in coordinating the completion of this effort between these divisions. The inventory instrument was successfully pilot tested in Lofa and edited for further testing in Bong and Nimba counties.

The validation and finalization of the Infrastructure Policy document has been a long process, mostly due to lack of follow-up by MOHSW staff. The document finally was adopted by the Ministry, when RBHS intervened to facilitate the final coordination between the IU and the Minister. Taking action on behalf of the IU will continue to be necessary whenever decisions or follow-up is required.

In the upcoming extension year RBHS will undertake a situational analysis of the IU which will help to identify the technical and managerial strengths and weaknesses of the unit. Based on previous challenges faced in carrying out activities we anticipate human resources, management and leadership will be points of concern for scrutiny to identify constraints and develop appropriate capacity-building interventions.

Highlights of planned activities for the extension period

During the extension period the following activities have been planned:

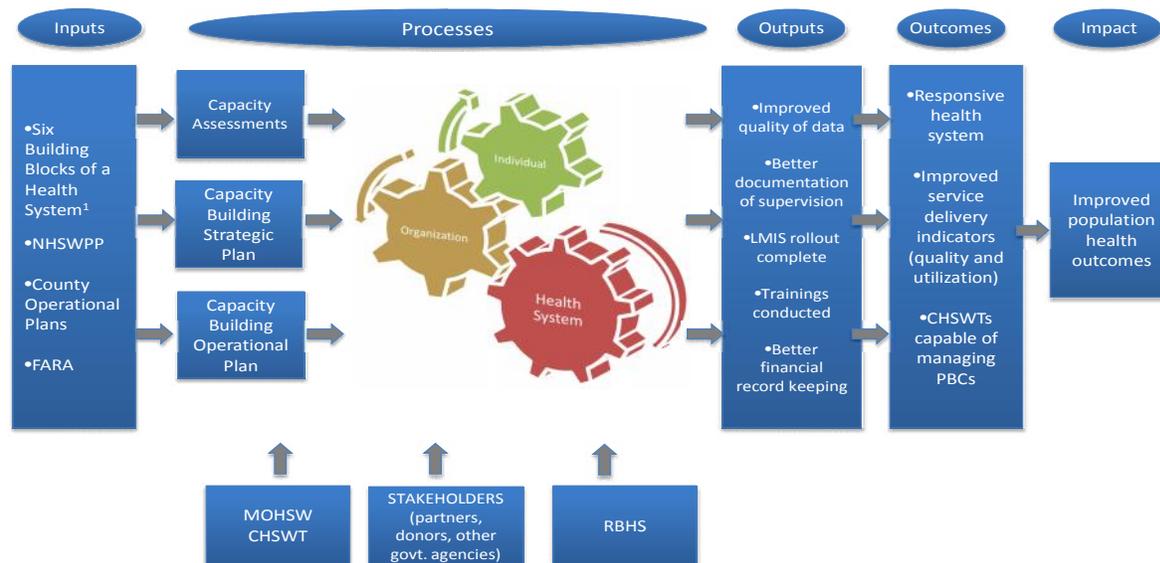
- Undertake a situational analysis of the IU and develop necessary capacity-building interventions
- Prepare project management guidelines for infrastructure projects
- Complete MOHSW adoptions of the building standards and present to the PCT for final approval
- Complete procurement for the NDS pharmaceutical warehouse
- Continue implementation of facility infrastructure inventory in Bong and Nimba and develop an infrastructural database
- Complete training of IU and RBHS staff in use of architectural and engineering software
- Complete renovations of 3 Nimba facilities and Barkedu clinic in Lofa County as well repairs of the EBSNM electrical system
- Contract for the completion of water wells for Fishtown and River Gbey health facilities in River Gee and Barkedu in Lofa County

Intermediate Result 2: Increase the quality of health services through improving infrastructure, health workforce and systems performance by enhancing capacity to plan, manage and monitor a decentralized health system

Health system strengthening represents one of the main pillars of the 2011-2021 National Health Policy. The ongoing building of strong national health systems will have a major influence on the success of the government's decentralization policy, as well as on increasing the utilization and quality of health services.

In 2012, RBHS successfully transitioned the project into a massive capacity building effort with the development of capacity strategic framework and plans based on a capacity assessment at central level and in the three FARA counties of Bong, Lofa, and Nimba. The Capacity Building Framework (*see Diagram 1*) proposes a comprehensive approach to capacity building with interventions addressing individual capacity, organizational capacity, as well as system building. The MOHSW and RBHS organized a capacity building retreat in February 2013 to build consensus around the type of interventions to be included, based on the National 10 Year Health Plan and addressing the six building blocks of WHO. Both central MOHSW staff as well county health team representatives attended the retreat and further developed capacity building work plans which were integrated in the annual operational plans.

Diagram 1: MOHSW Capacity Building Framework



¹ 1) Health Service Delivery; 2) Health Workforce; 3) Health Information Systems; 4) Access to Essential Medicines; 5) Health Systems Financing; 6) Leadership and Governance. World Health Organization. Monitoring the building blocks of health systems: a handbook of indicators and their measurement strategies. Available at: <http://www.who.int/healthinfo/systems/monitoring/en/index.html>

In addition, in 2012 RBHS started working with the MOHSW on the implementation of the FARA activities. The role of RBHS is to provide technical support to the MOHSW and the counties in preparing the quarterly deliverables and to assist USAID with data validation and financial reporting. RBHS is part of the FARA Steering Committee that meets weekly to discuss the progress of implementation of the various activities.

RBHS substantially strengthened its capacity building team with the hiring of a new Capacity Building Director in May 2013. She has particularly focused on clarifying the role of the Capacity Building Officers (CBOs) and Monitoring and Evaluation Officers in providing support to the CHSWTs. Also, the role of the Program Advisors has gradually changed to capacity building (CB) support and ensuring better CB coordination between the Central and the County levels.

In the following paragraphs, activities undertaken in Year 5 (October 2012 to October 2013) in capacity building at central and county level, as well as in strengthening the regulatory mechanisms for health training institutions, are summarized. We look critically at the results in terms of successes, challenges and constraints, and lessons learned, and list a number of key activities planned for the project extension.

- Intervention 2.1: Build capacity of the Central MOHSW through the six building blocks of a health system
- Intervention 2.2: Strengthen MOHSW systems and human capacity at county level in Bong Lofa, and Nimba

- Intervention 2.3: Strengthen Professional Health Institutions, including TNIMA, EBSNM, LBNM, and LMDC

For more details, please refer to the Year 5 Work Plan Status Report in Annex 7.

Intervention 2.1: Build capacity of the Central MOHSW through the six building blocks of a health system

RBHS has provided support to the Central MOHSW to set up institutional mechanisms for coordination of capacity building interventions within the central MOHSW and for support to the county health teams. The MOHSW has hired a Capacity Building Coordinator in the County Health Services Division. RBHS has contributed to the development of TORs for a Capacity Building Core Group that has grown out of the group established to oversee the initial Capacity Assessment and related planning activities. Related TORs have also been developed for Regional Support Teams and Desk Officers who will provide technical support to the county health teams.

BB1: DELIVERING ESSENTIAL HEALTH SERVICES

Supportive Supervision

Activities and results

RBHS provided technical support to the development of a National Monitors' checklist that includes gap analysis, feedback mechanisms, and the training of national monitors on the use of the checklist. On a quarterly basis the national monitors visited the counties in follow up of the CHT integrated supportive supervision. They also made visits to a sample of 25% of randomly selected health facilities and communities for counter verification of the reports from the counties.

At the county level, the county team supervised at least 75% of health facilities every quarter and each health facility was reached at least twice a year. Findings from the county level integrated supportive supervision indicate that staff are increasingly adhering to protocols, identifying and documenting gaps and taking actions to improve the services.

Documentation of findings, feedback sharing and timely submission of reports is gradually improving. Quarterly reports on integrated supportive supervision are a deliverable under FARA. They indicate that the counties met targets as follows:

1. Bong County met 71 % of targets for the period of July 2012-May 2013
2. Nimba county met 53% of targets for the period of July 2012-May 2013
3. Lofa County met 92% of targets for the period of July 2012-May 2013.

Successes, challenges and constraints and lessons learned

The integrated supportive supervision has strengthened coordination and integration at all levels, served as motivation for staff and improving the relationships within the county health team. The reports also indicate that the integrated supportive supervision improved the skills of supervisors in implementing the EPHS.

However, the following challenges remain:

- The checklist is too lengthy and detailed; it has been agreed to revise it in the near future.
- Many proposed actions provided as feedback to the counties remain unresolved at the next round
- Some counties are not following the schedule for the monthly supervision due to competing priorities

Highlights of planned activities during the extension period

- Assist CHSWT in organizing and institutionalizing quarterly meetings with health facilities and communities to share key information, exchange feedback on supportive supervision results, and discuss action items
- Work with the counties to review and update both central and county level supportive supervision manual and checklists
- Conduct in-service training on supportive supervision for county supervisors
- Assist CHSWT in compiling quarterly supervision reports on findings and identified gaps

Strengthen MOHSW capacity to implement PBF strategies for delivery of EPHS

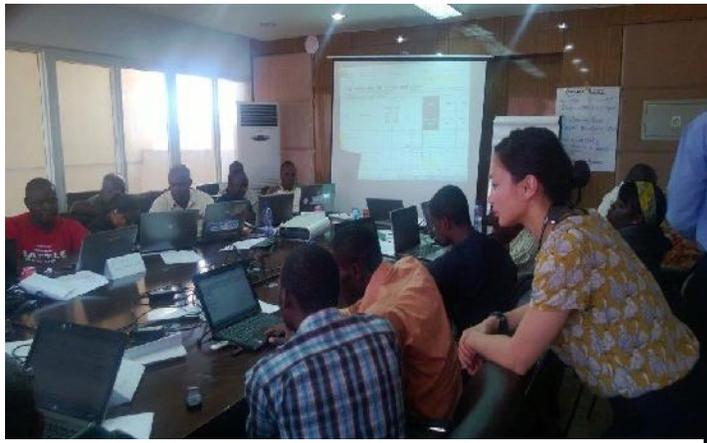
Activities and results

Since the end of the RBHS managed PBCs, RBHS has fully supported the establishment of the Performance Based Financing (PBF) unit within the MOHSW and posted a full-time PBF advisor to the newly created Unit. RBHS significantly contributed to knowledge and skills transfer through work sessions, on job mentoring and coaching, and sponsorship to attend international PBF courses. As a result, the PBF Unit has developed institutional and implementation arrangements for the MOHSW and the counties. The MOHSW owns the scheme, and the PBF unit effectively leads the activities at the central level and provides oversight for the decentralized PBF implementation.

In this reporting period, there was a large focus on improving the quality of work at the central level and the oversight provided to implementing partners at county level. Thus, RBHS continued to support the refinement and effective management of the PBF scheme. This included: (1) providing ad hoc support to county implementing partners; (2) mentoring and coaching on effective use of PBF management tools, tracking performance achievements and gaps and providing timely feedback to relevant stakeholders, (3) monthly partners' meetings; (4) quarterly review meetings; (5) quarterly data counter-

verification; and (6) monitoring PBF implementation and sharing findings with implementing partners (IPs), program directors and senior MOHSW staff.

RBHS supported a 2 day training on 1-2 April 2013 for central MOHSW staff on the general PBF principles, and specifically on the MOHSW PBF scheme. A total of 46 participants attended the training, including assistant ministers, directors, supervisors and technicians. The workshop succeeded in the following: (i) expanding knowledge of PBF principles and sharing lessons learned from around the world, (ii) offering a platform for improvement in collaboration among different units, and (iii) fostering a data-driven culture for effective results and efficient use of resources.



Training on the PBF management tool

Today, M&E, NMCP and EPI combine resources with the PBF unit for activities at the county level (counter-verification, EPI data harmonization, contract monitoring and verification of information). Other units (i.e. MCH, FP, and NMCP) contribute to regular meetings with IPs through presentations, information sharing and provision of feedback.

RBHS supported the development of PBF management tools for central MOHSW and county use. In March 2013, a 2 day workshop was organized and attended by 30 participants from central MOHSW and Bong, Lofa, Nimba, Grand Cape Mount and Bomi counties. Participants conducted a validation of the tools and benefited from a practical, hands-on training on the management tool which encompassed: (i) setting the baseline and target using the tool; (ii) entering the achievement for PBF indicators and generating invoices for PBF bonuses; (iii) interpreting the data, explaining trends, inconsistencies, and critical focus areas; and (iv) acquiring a solid understanding of how the tool will help them accomplish their routine monitoring of PBF facilities in their counties.

RBHS supported the PBF unit in its endeavor to strengthen capacity of counties for decentralized PBF implementation. RBHS contributed to develop training materials and conduct in-depth training of extended CHTs. This exercise: (1) trained the CHT and implementing partners at the county level on PBF processes, procedures, roles of specific key players at the county level; (2) trained on PBF management tools; (3) assisted in establishing a decentralized body for oversight of PBF implementation at the county level (the county PBF steering committee); and (3) trained the trainers who will be responsible for training health facilities staff on processes and procedures relevant for PBF implementation at the county level. Lofa and Nimba were trained in April and May 2013, respectively. Training in Bong was delayed by the pending procurement and uncertainty on which IP would be awarded the contract. County-specific achievements in the wake of the training are presented as respective county achievements under Intervention 2.2.



The Minister of Health, Dr. Gwenigale, addressing the PBF stakeholders

Through technical discussions with concerned partners, RBHS supported harmonization of the MOHSW primary level PBF scheme and the secondary level scheme supported by the World Bank (WB). Significant gains were made in harmonizing the institutional and implementation arrangements. Both schemes, to a great extent, will use the MOHSW system, and the MOHSW PBF unit will play a key technical role in the secondary level PBF scheme. In early April 2013, RBHS supported a two-

day PBF stakeholder's consultation meeting attended by 58 participants from the counties and central MOHSW and led by the Minister of Health. Participants included representatives of the Ministry of Finance, USAID, WHO, World Bank and other Liberia health partners. Opportunities for harmonizing the tools used in the two schemes are being explored, one prime candidate being the PBF management tool. Participants also agreed on the need to advance a financial sustainability plan.

Successes, challenges and constraints, and lessons learned

The establishment of the PBF Unit of the MOHSW started in July 2011. Initially most of the time was spent on strategic planning and tool development. After three quarters with no significant improvement in PBF indicators, the last five quarters (up to June 2013) reported a steady improvement in PBF service delivery indicators. For example, over the last eight quarters of implementation in health facilities implementing PBF, the skilled birth attendant rate (SBA) increased from 29% to more than 60%, the uptake of IPT2 increased from 33% to more than 60%, and the couple-years of protection (CYP) increased from 2,500 to more than 16,000.

Despite being relatively new, the PBF unit is now often solicited to contribute to other MOHSW initiatives, such as assessment and planning of county capacity for contracting, especially as the MOHSW gradually moves from contracting out the delivery of health services to contracting in. Though this at times caused a strain on the PBF unit resources, there is clear recognition by those in the MOHSW that RBHS efforts to strengthen the PBF unit were successful. The PBF unit increasingly plays a key role in facilitating collaboration across units to ensure effective use of resources and ensure that timely feedback is provided at different levels for overall improvement of quality health services.

System constraints, particularly relevant to disbursement of funds and frequent stock-outs of essential commodities, affected the timeliness of planned activities, the quality of supervision, and limited the extent to which implementing partners could be held accountable for not achieving targets. This is reflected in poor performing administrative

indicators, whereas service delivery indicators have posted an upward trend in the last three quarters.

For continued improvement, the MOHSW will need to remain flexible enough to adjust to changing needs and lessons learned. Two examples include: (1) a successful PBF implementation requires significant M&E functions. Better organization, timely availability of information and subsequent feedback to stakeholders can be improved with a skilled M&E officer embedded in the PBF unit and involved in day-to-day activities of the PBF unit, which the current arrangement does not provide. (2) Future revision of IP indicators linked to bonus will need to account for specific functions pertinent to CHSWT ownership of the PBF scheme.

Highlight of planned activities for the extension period

- At the central level, the focus will be on improving the quality of PBF related processes, ensuring effective and quality oversight is provided to counties
- Support maturation of a PBF scheme that is flexible enough to adjust to changing needs and lessons learned from implementation
- Complete the training of trainers in Bong County and provide continued assistance to Bong, Lofa and Nimba in setting up a PBF county steering committees in order to strengthen ownership of the scheme by counties and promote decentralized PBF implementation
- Supportive visits to implementing partners in counties to strengthen effective implementation of PBF scheme; particularly the effective use of PBF management tools.
- Continued support to harmonize the PBF schemes for the primary level and the secondary level. One identified area for harmonization is the conception of a management tool for the secondary level, which would be similar to the tool used for primary level

Provide TA to MOHSW in strengthening quality of service at in-patient level

Strengthening the MOHSW capacity to improve the quality of the services is one of the key capacity building interventions. RBHS began this effort in 2011, with the provision of technical support to the development of outpatient clinical standards and building the capacity of MOHSW and county staff in applying these standards.

Activities and results

In 2012, RBHS has assisted the MOHSW in the development of in-patient clinical standards in the following technical areas: Pediatrics, Malaria, Surgical Emergency and Care, Medical Emergency Care, HIV/AIDS/STIs, and Tuberculosis. For this purpose, a workshop was organized in February 2013 gathering 27 health workers representing the following institutions: Cuttington University, Phebe School of Nursing, Liberia Board of Nursing and Midwifery (LBNM), Phebe Hospital, C.B. Dunbar, G.W Harley, Tellewoyan and Foya Hospitals, Saclepa Health Center, MOHSW central level program staff (i.e. National Malaria

Control Program (NMCP), National Leprosy and TB Control Program (NLTCP) and National AIDS Control Program (NACP) and the County Health Services.

A total of 8 clusters of in-patient clinical standards were developed and piloted at the G.W. Harley, Saniquellie and Saclepea Health Centers in April, 2013. Nine (9) professional health workers (RNs, CMs, RNCMs, and PAs) participated in the process. Based on the findings of the pilot, the standards were modified and prepared for the accreditation process.

The process continued with the training of 22 professional health workers as assessors for accreditation process in May 2013. RBHS provided technical assistance to the MOHSW to train assessors and analyze the data. The preliminary results of the assessment are available.



Validation workshop on In-Patient Standards

Additionally, 3 of the 8 clusters were validated by 30 health practitioners during a 3 day workshop in Monrovia. Of the participants at the validation, 10 were specialists in obstetrics/neonatal care while others were medical practitioners and other professional health workers.

In August 2013, MSH consultants Dr. Salwa Bitar and Lisa Pelcovits introduced the Improvement Collaborative (IC) Approach, trained 10 IC facilitators, and 34 participants including the teams from 4 hospitals which will function as demonstration sites: (1) C.B. Dunbar Hospital in Gbarnga, Bong County; (2) G.W. Harley Hospital, Nimba County; (3) Kolahun Hospital, Lofa County; and (4) LGH Hospital in Buchanan, Grand Bassa County. Three of the demonstration sites are located in the FARA counties. The Liberia Government Hospital in Grand Bassa was included upon the request of the MOHSW.

The IC teams in each hospital included the hospital medical director, nursing services directors, and other staff. Quality Improvement Committees were selected for each county which include CHSWT members. The improvement packages for the first phase included Obstetric/Neonatal, Infection Prevention and Pediatrics. A set of 14 indicators were set up for monitoring the improvement of the selected service delivery packages. The teams prepared a work plan which included the collection of baseline data around the indicators. A total of 8 clusters consisting of 41 sub-clusters and 422 standards were developed and pilot tested.

During 29-31 October 2013, the MOHSW and RBHS organized the first in a series of Quality Improvement Collaborative Learning meetings for members of the 4 IC teams. This meeting, held in Saniquellie, came three months after the start of implementation of the IC by the 4 hospitals. During the 3 day sessions, the teams shared and synthesized progress, positive changes and cross-cutting challenges around the implementation of standard in-patient standards in the following clusters: obstetrics, neonatal care, pediatrics, and infection prevention. Three new sub-clusters were added to the package: Diarrhea

Management, PPH and Waste Management. The noticeable energy shown by the teams in problem solving, data management and monitoring was encouraging. QI teams documented and reported baseline and progress data around selected indicators. Two hospitals are utilizing their own resources while advocating for essential supplies for the IC package. Many positive changes were initiated to implement and document the clinical standards. At the end of the sessions, each of the four teams developed a work plan for the next action period of three months (November 2013 – January 2014).



Midwives in readiness for delivery at G. W. Harley Hospital, Nimba

Successes, challenges and constraints, and lessons learned

The first results from the pilot Improvement Collaborative show that various service improvements have been implemented, such as the systematic use of partographs, proper storage of oxytocin, and postpartum family planning counseling. But it is also clear that the challenges to the implementation of ICs are enormous, such as inadequate and poorly paid staff, insufficient drugs and supplies, poor infrastructure, and limited or inadequate space.

Highlights of planned activities for the extension period

- Continue to hold learning sessions for the Improvement Collaborative (IC) demonstration team, document best practices and recognize best performances
- Organize and conduct IC spread strategy workshop at the central and county levels
- Develop dashboard at IC demonstration hospitals
- Quarterly validation of demonstration site data

Provide support to the MOHSW to build robust clinical referral systems

Pilot work in this area has taken place in the Family Health Division for the development of MNCH referral protocols. Please refer to Intervention 1.1 for more details.

Provide TA to Mental Health Unit for the implementation of the strategic plan

Activities and results

Implementation of service delivery in mental health has been slow due to the shortage of mental health service providers in the country. To date there are one hundred licensed mental health clinicians in the 15 counties of Liberia. Twenty-three of these clinicians are

presently enrolled in the #6 cohort of students in Phebe Hospital, and will finish their training in March 2014. The RBHS MH Advisor worked with the Carter Center in the training of the mental health clinicians.

Training and Awareness of Primary Care providers

RBHS, in collaboration with the MOHSW MH Unit and 5 county health teams from Sinoe, Grand Kru, Cape Mount, Lofa and Nimba, supported capacity-building for 120 health workers, mainly Officers In Charge (OICs) of health facilities. This is in line with the EPHS Policy mandate to incorporate mental health services into primary health care provision. Similar capacity building activities are planned for other cadres of health in the RBHS supported counties of Bong, Nimba and Lofa within the next few months.

The WHO mhGAP Treatment Guidelines were adapted to fit the Liberian context, and were finalized and printed with RBHS's participation during the period under review. RBHS along with the Training Unit at MOHSW reviewed and updated the Mental Health In-service Training Module. Other mental health service providers from Médecins du Monde (MDM), 4 training institutions (MPCHS, Phebe, TNIMA, Cuttington University) as well as some service providing institutions (J.F.K., Redemption, James Davies, SOS, and Grant) participated in the review.

In an effort to address the outrage expressed by the public regarding mentally ill individuals on the streets of Monrovia, RBHS along with the MOHSW organized and held a press conference. Journalists from several media institutions attended the conference. Additionally, RBHS participated in a 3 day workshop for journalists organized by the Carter Center. The workshop centered on media reporting on mental health and outlined some issues of ethical concerns in reporting mental health cases.

World Mental Health Day

RBHS played a major role in organizing and delivering activities marking World Mental Health Day (10 October 2013) in Buchanan, Grand Bassa County. Several schools participated in a parade on Tubman Boulevard and an organized a program at the fair ground where the Director of the Mental Health Unit, Dr. Meiko Dolo, served as keynote speaker, addressing mental health and the older adult.

Successes, challenges and constraints, and lessons learned

The provision of technical MH updates for the current health workforce is gradually leading to the discussion of mental health at various levels of health service delivery in the country. Additionally, more than one hundred nurses (RNs) and physician assistants (PAs) have been trained to provide services for individuals with psychological problems. This area of health has received little attention for years. As a result of the MH technical updates and the 6-month mental health clinicians training, some health workers are shifting their focus toward mental health.

Mental health in Liberia has faced many challenges, a major one centered on the lack of adequate qualified mental health providers. The current training of mental health clinicians is an attempt to provide an answer to an emergency situation. These clinicians are trained

to provide services at the primary level. Presently, mental health clinicians are being posted in the fifteen counties of Liberia, specifically in the county hospitals. To achieve structured and sustainable service delivery in mental health, the MOHSW must double its efforts by developing a training program to train psychiatric nurses and physician assistants.

The provision of mental health services should be made attractive by the MOHSW through adequate compensation of service providers. Additionally, mental health service providers do not receive psychotropic drugs and medical supplies to manage mental disorders. Since there are no mental health referral protocols, community facilities find it difficult to refer cases that are identified in the communities. Another major challenge facing service delivery in mental health is the absence of adequate referral facilities. The Catherine Mills Rehabilitation Center, Liberia's largest mental health referral facility, was destroyed during the Liberian civil war and has not been rebuilt. Edward Grant Memorial Mental Hospital was a private facility, and this 80 bed facility is now operated by the J. F. K. Medical Center, but is inadequate and is operating without the oversight of a psychiatrist.

Highlights of planned activities for the next 6 months

- Provide mental health updates for other cadres of service providers in Bong, Lofa and Nimba counties
- Participate in structuring service delivery by mental health clinicians in Bong, Lofa and Nimba counties
- Initiate wellness units in Lofa and Nimba counties
- Provide mental health monitoring and supervisory visits to RBHS supported counties
- Participate in developing materials for training community health workers

Strengthening the Community Health System including Health Promotion activities

Activities and results

Strengthening community health structures

RBHS in collaboration with the MOHSW and the Bong CHSWT made concerted efforts to integrate the activities of the Community Health Services Division (CHSD) and the National Health Promotion Division (NHPD) activities. Major work was done to strengthen the community health structures for increasing demand and utilization of services at the health facilities through the establishment of “demonstration sites” in Bong County.

The initiative began in March 2013 following a high-level joint collaborative meeting in Gbarnga, Bong county. The meeting, facilitated by RBHS, involved the CHSD and the NHPD of the central Ministry of Health, the Bong County Health and Social Welfare Team (BoCHSWT), and its implementing partners. As a follow-up, advocacy meetings were conducted with key stakeholders within the selected districts of Salala, Suakoko and Kokoya. These first rounds of meetings held in July brought together opinion leaders including commissioners, paramount, clan, general town chiefs, community health and development committees, community health committees, women and youth leaders and

community health volunteers. The gatherings provided the forum for community leaders and other stakeholders to take ownership of community health activities, support the various community health structures and strengthen the relationship between community stakeholders and health facility staff to work in partnership to promote sustainable health. Participants recognized the importance of services provided to communities by health facilities through outreach and through CHVs. The participants also realized the need for the facility staff to involve them in aspects of their activities, especially informing them ahead of any major activity.

In early October, a series of Community Health Development Committee (CHDC) meetings were convened within the three selected districts. These collaborative initiatives with the MOHSW Central (CHSD & NHPD), the Bong CHSWT and Africare (implementing partner) are intended to further bridge the gap between the household, the community and the facility through capacity building of community-level structures. This would serve to fulfill the CHDC role as representatives of the community for demand of services and as gate



keepers to increase quality of services provided by the MOHSW health facility. Discussions at these meetings focused on a common understanding of CHDC members as it related to the community, the community health volunteers (TTMs and gCHVs), and the health facility. Participants developed roadmaps to strengthen links between communities and health facilities and to establish and maintain a functional CHDC and Community Health Committee (CHC) in each catchment community.

Based on the success of these demonstration sites, the Bong CHSWT decided to scale up community health strengthening activities to all districts in Bong county. During the extension year, RBHS will expand these activities to Lofa and Nimba counties.

Strengthening health promotion activities

One of the major goals of the demonstration sites is to incite behavioral change in priority areas such as Maternal and Child Health, Nutrition, and Family Planning. Therefore, in addition to the strengthening of community structures, RBHS continued to provide support to institutionalize health promotion activities at the county level and below. From 6-9 May 2013 RBHS supported the MOHSW in building the capacity of County Health and Social Welfare Teams (CHSWTs) to produce county-level BCC materials and messages. Twenty-four participants from the FARA counties of Bong, Lofa and Nimba came together at the Phebe Compound in Bong County for a 4 day session. Based on these interactive sessions they produced and pretested zero drafts of audio messages and printed materials based on four MNHC interventions themes: (1) Newborn care (recognition of danger signs and prompt referral); (2) Recognition of danger signs in pregnancy, labor and delivery; (3) Importance and benefits of ANC visits; and (4) Benefits of facility delivery.

The Bong County Health and Social Welfare Team and partners in collaboration with RBHS also held a 2 day brainstorming session to formulate a draft “Bong Media Strategy.” Two members from the community radio stations (Radio Gbarnga and Super Bonges) participated in the exercise. Major health problems addressed during the exercise included malaria, maternal deaths (often as a result of teenage pregnancy), STI/HIV & AIDS, and communicable diseases including diarrhea. Deliverables during the process included a draft communication strategy and media plan along with timeline and recommendations for implementation.

RBHS also organized the final three rounds of CHEST Kit, a package of health information and education materials for CHVs to facilitate on-on-one and group health education and promotion sessions trainings mainly in Nimba County. These training exercises were in continuation of an RBHS initiative to train gCHVs on CHEST Kits in collaboration with MOHSW, the CHSWTs, and the IPs within five RBHS Project counties. Between 30 October 2012 and 27 February 2013 RBHS in collaboration with the MOHSW, Nimba County Health Team and Africare trained an additional 200 gCHVs in Karnplay, Saclepea and Tappita. This brings the total to 847 gCHVs trained in the use of the CHEST Kit within the 5 counties.

Provide technical support to the National Health Promotion Division

RBHS remains engaged with colleagues at the NHPD to further build capacity in health promotion and has supported the NHPD to reactivate monthly working meetings with the various programs of the MOHSW and other health partners on health promotion related activities.

In the wake of the launch of the Essential Package of Health Services (EPHS), RBHS initiated a series of undertakings to address the information gaps in the existing communication strategy. The goal was to include those interventions that were not previously addressed in the BPHS such as non-communicable diseases and neglected tropical diseases. To date, solicited inputs from stakeholders including the MOHSW on the final draft of the second national communication strategy have been inserted and a validation session is planned for mid-December, 2013. Following the validation session, the next stage is to print and disseminate within the first quarter of 2014.

RBHS supported the NHPD to conduct central level capacity building for BCC focal persons. The goal of the four-day training was to improve capacity of the participants for planning and implementing health promotion programs for the Ministry of Health and Social Welfare. About 21 participants representing divisions and programs within the MOHSW benefited from the exercise. For the first time, participants were drawn from the Department of Social Welfare, Mental Health Unit and the newly created Non-communicable and Neglected Tropical Disease Division of the MOHSW. Topics covered emphasized the relevance of health promotion in the health care delivery system of Liberia.

In collaboration with National Health Promotion Division (NHPD) and the Monitoring and Evaluation (M&E) Division at MOHSW, RBHS conducted a workshop on Monitoring and Evaluation of social behavior change communication interventions. John Hopkins University Center for Communication Programs (JHU/CCP) Professor, Stella Babalola, PhD

served as lead facilitator at the 5-day intensive exercise conducted from 1-5 July in the conference room of the MOHSW.

With the lack of well-trained staff, the Community Health Services Division has not been able to implement the full set of planned activities. One of these activities is the scaling up of the integrated Community Case Management (iCCM) after a successful pilot by RBHS in 2011. The main reason for this delay is the lack of implementation of various support systems such as the Community Health Services supervisory system; the Community Health Information System (C-HMIS, see BB3); and the Community Supply Chain Management System (C-SCMS, see BB4). Without the solid support of these systems, iCCM can not be implemented. RBHS therefore has worked with the CHSD to gradually develop these support systems. As for the supervisory system, a manual and tools are under development, but the appointment of dedicated Community Health Services Supervisors (CHSS) in the health facilities is progressing very slowly.

RBHS, in collaboration with other partners such as Equip, Tiyatien Health, and CHAI, has assisted the CHSD in developing a revised strategic and operational plan for the next 5 years under the name of the Community Health Road Map. At the end of October, this road map was close to finalization.

Successes, challenges and constraints, and lessons learned

As described in previous documents, one of the main problems facing the central MOHSW is its fragmentation into multiple units and the lack of coordination between them. In the past year, RBHS successfully facilitated the integration of the activities of the community health services and health promotion divisions of the MOHSW, better defining the functions of each. While the CHSD focuses on strengthening community structures, NPHD's focus is on behavior change. The joint efforts undertaken in the demonstration sites have substantially increased the efficiency of both divisions.

Given the continuing dearth of well-trained human resources, ongoing technical assistance and mentoring as well as on-the job-training in program management, will be needed for both the CHSD and the NPHD, as well as for the counties. As was stated earlier, the scaling up of iCCM can only move forward if the various CH support systems will have been developed.

Improving the coordination of public health (PH) messaging still remains a challenge. The completed National Health Promotion Policy calls for the establishment of groups such as the Health Promotion Working Group and other technical working groups. These groups can help ensure full participation and adherence to proper and effective messaging. To be effective, health messages must be coordinated around specific campaigns, prioritized, and sequenced. RBHS will continue to collaborate with the MOHSW and other partners to disseminate the national BCC strategy to ensure that there is greater coherence, coordination, and consistency around PH messaging, as well as other aspects of BCC.

As reflected in the previous semi-annual report, capacity of MOHSW's Health Promotion Division is limited in supporting other MOHSW departments and leading effective BCC

campaigns and initiatives. RBHS continues to engage colleagues at the NHPD through the conduct of joint activities, field trips, trainings, and material development.

Highlights of planned for the extension period

- Collaborate with NHPD, CHDS, CHSWTs, and IPs in Bong to launch community quality improvement and follow up activities of the demonstration sites
- Roll out demonstration sites in Nimba, and Lofa by conducting stakeholders meetings at county, district and community levels
- Implement and further strengthen the community health supervisory system at county, district, and facility levels
- Provide technical support to National Health Promotion Division (NHPD)
- Support NMCP and NHPD to develop, pretest, produce and air IPTp materials and messages based on new guidelines
- Scale up of gCHV training in the use of the CHEST Kit to other health partners and counties based on request.



gCHVs at the Nokwai RI Toolkit Training Site

BB2: HEALTH WORKFORCE

Strengthening Human Resource Management Systems

Activities undertaken and results

RBHS was requested to participate in 2 ad-hoc task teams charged with moving forward pieces of a rational payroll system. The first effort, in late February, included the

development of a framework to rationalize salaries by cadre and provide appropriate compensation packages based on locality and experience and/or years of service. The second was moving forward on a salary supplement policy and strategy that could inform all donors, in particular the Global Fund. A framework was constructed and budgeted for the current scenario; a minimum package, and an optimal one. The Salary Supplement Policy and Strategy fits well within the Public Sector Modernization project now underway at the Civil Service Agency (CSA). CSA has largely taken the lead on policy and strategy issues with substantial MOHSW inputs, tailored to the present situation. These ad-hoc task teams highlighted the need for standardized, valid data for all health workers currently in the system. The Health Worker Salary Survey conducted by the USAID funded Governance and Economic Management Support (GEMS) project provides the largest database of individually identifiable information on health workers. However, this data was self-reported and not validated. Taken together with the information that had been gathered by CSA for its biometric identification system and by the MOHSW itself, there is an abundance of information available on many staff members. It is not, however, uniform or a complete standard record. The next major activity in this building block began to address this issue.

Five MOHSW staff have been trained in Tanzania and Senegal on an integrated Human Resources Information System (iHRIS) that is an open-source platform developed under the USAID funded Capacity Plus Project. The software is fully compatible with DHIS 2, the HMIS used by the MOHSW. The staff are from different levels of 3 units within the Ministry who influence, gather and use HR information: (1) the Personnel Division (PD), under the Department of Administration; (2) the HMIS Unit; and (3) the Human Resources Unit (HRU), both under the Department of Policy and Planning. They attended three different training events, and were supported in their application and start-up of the system by a West African consultant who has extensive experience with the iHRIS. The final customized system will include basic information on all personnel including qualifications, length of service, assigned facility, and employment/assignment history.

As a result, there is now a team of staff, with operational, managerial and IT-related responsibilities who share:

- A common understanding of the potential and requirements of the system
- Responsibility at their respective levels for the guidance, development and operation of the system; the HRU and PD Directors and their teams are collaborating with the HMIS and IT Units to customize the system for Liberia and to populate the system with valid data
- Identification of the information currently available and needed in order to have complete individual personnel records.
- A way forward that includes a pilot that will consist of validated data from MOHSW headquarters, the TB Annex and a nearby county.
- A mentoring relationship with the consultant who provide TA “at a distance” as issues arise

The planned activities on the performance appraisal system have been deferred to the extension year for several reasons, including the delayed arrival of the Capacity Building

Director, several HR crises that have required the attention of key HR staff at MOHSW as well as senior managers, and the need to align the system with that released (and now under revision) by the Civil Service Agency.

FORECAST Scholarships program

As part of RBHS's role in individual capacity building, the project has been working on supporting the FORECAST activities. FORECAST was a 5-year centrally funded contract, which was managed by Academy of Education Development (AED) until the contract ended in April 2011. RBHS has been supporting the FORECAST project by providing logistical and financial support to participants. Of the 16 individual participants supported by RBHS, 14 have completed their programs and have returned to Liberia. One participant has dropped out of the program and RBHS has obtained a letter from the participant explaining the reasons for his departure and failure to communicate this to the FORECAST project. The last remaining participant will finish his program in April 2014. A detailed listing of all participants can be found in Annex 4c.

Successes, challenges and constraints, and lessons learned

The iHRIS is a success in several respects. It started with the usual training request by a single individual interested in the software development aspects of the program. In order to move the application forward it was important to ensure that users were comfortable with the software and that senior managers were also familiar enough with the system to promote use, management and maintenance.

Two aspects of the implementation of iHRIS stand out as lessons learned in providing out-of-country training for individual, organizational and systems benefits. The first was sponsoring training participants who were representatives of the various units that will start up, manage and maintain the system. The second was timing the support of the technical assistance provider soon after staff had been trained. This timing allowed for immediate application and rapid identification of skills and concepts that were not fully mastered during the training program. The consultant, headquartered in Lagos, continues to provide support at a distance and will return to assess the pilot and further develop the system with the team.

Among the constraints in implementing activities in Building Block 2 is the level of staffing in the Personnel Department and the Human Resources Unit. Both units were highly involved in addressing the labor action undertaken by health workers in the summer and have since been engaged in gathering and rationalizing the information needed to address the long-term issue of equitable remuneration and conditions of service for all health workers. Attending to emergencies, routine work and long-term strategy may require staff changes in the Personnel Department and the Human Resources Unit. The iHRIS will go a long way in strengthening the system, and trained staff has been very keen to build and use the system. However, they have faced delays and challenges with workload and lack of access to the server storing the data. When the administrator for the server is out of the country at conferences or on training, there is no access to the server.

Highlights of planned activities for the extension period

- The pilot of the iHRIS will be completed and following its review, iHRIS will be expanded to the FARA counties. A plan for a nationwide rollout will also be developed
- Guidelines and tools for performance management will be rolled out to all counties. These guidelines are linked to the processes, timetables and requirements released by CSA in March this year and are currently under revision
- RBHS will support the MOHSW in monitoring the quality of performance appraisals and developing the skills of human resource officers (HROs) to provide feedback on appraisals to county supervisors
- The iHRIS will be further customized to summarize formal appraisals and also to track in-service training attended by individual health workers

Assist the MOHSW to strengthen the In-Service Training Program

Activities undertaken and results

RBHS assisted the Training Unit in conduct a 1 day stakeholder workshop with MOHSW programs and partners in an effort to clearly define the roles and responsibilities of the Training Unit (TU). Dr. Bernice Dahn, Deputy Minister/CMO stated that the Training Unit has major problems which needs to be addressed; all efforts have been made to addressed this issue but to no avail.

In collaboration with the training unit, a workshop was conducted to review and revise the emergency and mental health in-service training modules. Master trainers from the counties and stakeholders participated in the workshop. By the end of the workshop, emergency and mental health in- service training modules were finalized.

Successes, challenges and constraints, and lessons learnt

The revision of the mental health in-service training module was well timed. The module has been used to conduct mental health technical updates for OICs and other staff at health facilities in the RBHS supported counties. Those trained are now screening their patients for mental health issues at the primary care facilities and if needed referring them appropriately to the nearest MH clinician.

The institutionalization of the In-Service Training Program continues to be problematic. The MOHSW has not been able to follow up on the meeting conducted in 2011 regarding the TOR for the TU, primarily because the unit had no staff for most of the year, as the only staff member in the unit was away attending a course. Also, according to the staff, there is no budget for the unit to implement activities, resulting in no staff, no training equipment/materials, no assigned vehicle for the unit, and no office equipment/ supplies.

Highlights of planned activities for the extension period

- Strengthen the TU to be able to function as intermediary between the counties and the training institutes
- Provide short term technical assistance (STTA) to assist the TU to revise the Training Strategy, making it more appropriate to meet the needs of the MOHSW
- Provide technical assistance and support to assist the training unit to update the In-Service training modules of the MOHSW and train county-level staff

BB3: HEALTH INFORMATION SYSTEM

The 10 Year National Health Policy and Plan has given high priority to the development of a decentralized Health Management Information System (HMIS) as an integral part of the national health system. RBHS has continued its support to HMIS in strengthening both the production of quality data and the use of HMIS information for decision making. The RBHS strategy for health information system strengthening involves: (1) improving staff capacity; (2) creating an organizational environment conducive to the use of information for decision making; and (3) improving the system components required for HMIS functionality.

Activities and results

Improve individual staff capacity on HMIS and M&E

Data management

DHIS2 is the software application Liberia HMIS is using to store, analyze and manage routine health service data. In late 2011, the MOHSW introduced DHIS2 web-based software replacing the Access based DHIS1 software. However, the county HMIS and M&E team lacked adequate skills to use the software beyond the data entry which was documented during the PRISM assessment in 2012. In order to improve the skills of the central HMIS Unit and the county teams, RBHS supported MOHSW through an international DHIS consultant, Dr Romain Tohouri, HIS Adviser for JSI, who provided consultancies in October 2012 and August 2013.

In October 2012, RBHS supported HMER to organize a training of trainers workshop on DHIS2 for 20 central level staff. Following TOT, the MOHSW organized three regional 5 day DHIS2 training workshops to cover 15 counties. RBHS co-facilitated the training in Gbarnga where participants from Bong, Lofa and Nimba counties were trained. Another training for central level trainers was organized in August 2013 focusing on new features of DHIS2 and on various useful reporting functionalities. Participants were trained on how to use iReport and HTML report to customize reporting, as well as on MySQL PostgreSQL to be able to import and export data from and to DHIS.

Data analysis

RBHS also joined the MOHSW in an all-county workshop on data analysis in Kakata in January 2013. The workshop, funded by NMCP, gathered 30 participants, M&E Officers and

Data Officers, from 15 counties for a 5 day training. RBHS co-facilitated the workshop and provided training on using Pivot Tables in managing DHIS data. Participants were taught to download DHIS2 data in Excel spreadsheets to prepare program-specific summary spreadsheets and break the huge DHIS2 database into manageable and meaningful subsets. Such pivot table summaries can be automatically updated by linking with DHIS2.

Use of information for decision making

The 2012 PRISM assessment had shown that necessary skills on data analysis were lacking at the county level and use of information was therefore not practiced. RBHS, therefore, developed three modules for HMIS data use for action by county health teams in Bong, Lofa, and Nimba. The first workshop built staff capacity to understand the HMIS data elements and raw data summary. The second workshop focused on data analysis, using indicators and developing county M&E plans. The third series of workshops focused on problem solving approaches so as to create an “information culture” where information is used for decision making. The workshops bring together data producers (HMIS and M&E) and data users (program managers and clinical supervisors) to review data from HMIS and



Display of graphs in a health clinic

other sources such as the LQAS outcome surveys and use the data to solve underlying problems. Problem solving that involves a systematic process, from examining the HMIS data to identification of problems to solving them. Technical assistance for these workshops was provided through a collaborative set up between MEASURE Evaluation and RBHS. Workshops were held in Bong and Nimba to train entire CHTs as well as District Health Officers on root cause analysis as well as problem solving techniques and tools. The Lofa workshop had to be postponed and will be organized in November 2013.

Out-of-county staff training

RBHS has sponsored 3 staff members of the MOHSW HMIS, M&E, and Research (HMER) Division to attend various M&E and health information system out-of-country training events to build and update staff capacity. Two mid-level staff participated in training on Monitoring and Evaluation of Population, Health and Nutrition organized by MEASURE Evaluation in Addis Abba, Ethiopia. The staff stated that the course had helped them to expand their knowledge and skills on health program monitoring and evaluation.

Impact evaluation is increasingly used in evaluating the contribution and attribution of public health interventions. To help MOHSW to build its capacity on this area, RBHS sponsored Mr. Sanford Wesseh, the Assistant Minister for Vital Statistics, to attend a two week training in New Delhi in March on Impact Evaluation of Health, Population and

Nutrition Programs organized by the Public Health Foundation of India (PHFI) with support from MEASURE Evaluation. Mr. Wesseh, after his return from the training course, expressed his commitment to establish an impact evaluation study for key health programs of the Ministry of Health. He also felt the need for training more senior level ministry staff on impact evaluation, so as to help with the institutionalization of the training within the Ministry.

Improving organizational capacity for information use and monitoring & evaluation

RBHS supported county health offices in HMIS data management. The RBHS field team aided the CHTs with analysis of HMIS data to be presented at county health review/coordination meetings. RBHS has also supported the CHTs in improvement of quality of data by setting up data quality assurance mechanisms such as desk review of data, data quality assessments in health facilities and organizing data review meetings.

RBHS will continue to support counties in the use of various techniques to guide the process of use of information for decision making. Regular county quarterly data and health review meetings may be a better forum to practice sharing and use of information. RBHS is currently working with HMER and the county health offices to develop terms of reference for quarterly data review meetings. RBHS will assist the county health office to develop its capacity in organizing, implementing and monitoring the quarterly data review meeting.

RBHS has assisted county health teams (CHTs) in establishing a staff training database. The staff training database is an Excel spreadsheet that lists all staff of the health facility. For each staff person, the information on various trainings received by the staff over past year is entered. Using the database, the county can better respond to in-service training needs. A training meeting was held in all 3 counties to introduce the database to the CHTs. During the training meeting, discussions were held with CHTs regarding regular updating of the database. It is expected that later on this database will be linked with the iRHIS (*see BB2, Human Resources*). CHTs will work with the central Human Resources Unit in exchanging information on staff training and movements such as new recruitments and transfers.

MOHSW has used the DHIS2 software for over 1.5 years. Based on successful use of the software at central and county levels, HMER with technical assistance of RBHS consultant Dr. Tohouri, conducted a half day advocacy/demonstration workshop on DHIS2 to senior level central MOHSW staff. Over 35 senior staff attended and enjoyed hands-on practice of DHIS2. The participants practiced creating summary table data, and creating charts and GIS maps for selected indicators.

HMIS system strengthening

DHIS2 software

RBHS helped HMIS to update the DHIS2 so it can better provide useable data. DHIS2 had not previously been populated with facility catchment area population data. RBHS and MOHSW worked together on facility catchment population projection using the 2008

census data and age group population parameters, which were then uploaded to DHIS2 with the technical assistance of DHIS2 developers at the University of Oslo. After uploading facility catchment population data, the DHIS2 system was able to build indicators.

RBHS worked with HMER on health indicator definitions using HMIS data for various programs. The indicators have been in DHIS2, helping to generate results for selected organization level and periods. RBHS also provided technical assistance to the HMIS unit at MOHSW to transfer the DHIS 1 data into the DHIS 2 database, so that more meaningful data analyses can be conducted. However, instances of error were documented in the first attempt. RBHS further supported the HMIS unit to review and ensure accurate data matching between DHIS1 and 2 databases. At last, with the help of University of Oslo based experts, the HMIS Unit successfully transferred the legacy data to DHIS2.

Liberia has used the current version of HMIS for about 5 years. There have been changes in national health policies and priorities which necessitates a review and revision of HMIS. HMER is planning a review of HMIS to update the indicators and data to meet the current and future needs of national health program.

Community HMIS

RBHS is supporting the HMIS unit and the CHSD division in the roll out of the community health information system (C-HMIS). MOHSW and RBHS developed a roll out plan that included development of a standard operation procedures (SOP) manual on the CHV ledger and a training curriculum. MOHSW, RBHS and partners collaborated in a number of working sessions to produce the SOP and the training curriculum.

RBHS now is now working with the MOHSW to organize TOTs at the central level in January 2014. Later in the year, TOTs will be scheduled in Bong, Nimba and Lofa. The county level TOT will train a designated community health services supervisor (CHSS) from each facility who will in turn train all CHVs in a given catchment area.

Successes, challenges and constraints, and lessons learned

RBHS has made a significant progress in building individual, organizational, and system capacity of the HMER division of MOHSW as well as that of the county teams. The problem solving workshops in particular were very successful. Participants changed their ways of thinking about the link between problem identification and problem solving. The workshops were well attended and appreciated by the participants. The participants responded to an urgent need for CHTs to receive methodological support in their daily decision making processes. RBHS carefully documented all proceedings of the workshop and plans to write a summary report after the Lofa workshop.

The county and central level M&E and HMIS staff has developed capacity to use DHIS2 for data entry, analysis and generation of various reports. For the first time, HMER held a DHIS2 demonstration to senior central MOHSW staff which was both appreciated and applauded. Also, both the uploading of population data to DHIS2 and the successful migration of DHIS1 legacy data to DHIS2 are great achievements, facilitating the analysis of data and use of information.

These achievements were made amidst a number of challenges and constraints, outlined below:

- Scheduling of various activities in coordination between counties, central HMER and RBHS has proven difficult because of many competing priorities
- Use of information is a continuing process that needs strong leadership and commitment.
- Although progress has been made, HMER's capacity to handle to DHIS2 software is still limited due to the low number of capable staff. Hence, additional efforts will be needed to expand the capacity of the HMIS team on DHIS2 administration and database administration.

Highlights of planned activities for the extension year

- Institutionalization of use of information for decision making at county levels
- Roll out of community health management information system (C-HMIS)
- Review and revision of HMIS
- Develop Data Warehouse to better integrate the various HIS databases such as DHIS2, iHRIS, LMIS, etc.
- Assist county in documentation and use of integrated supervision data

BB4: ACCESS TO ESSENTIAL COMMODITIES

Supply chain management issues continue to hamper the delivery of quality health services, resulting in stock-outs of vertical program commodities including anti-malaria drugs, STI, ITNs, HIV test kits and family planning commodities. A particular issue is the community supply chain. Without commodities, the scaling up of integrated community case management (iCCM) is impossible. Yet, the county capacity for supply chain management is very limited.

Activities and results

The roll out of supply chain SOPs is spearheaded by the USAID DELIVER program. In the past weeks of last quarter, RBHS and DELIVER worked together to identify areas for building capacity at the county levels with regard to supply chain management (SCM). The arrival of the Year 4 drug order in Monrovia during the first months of 2013 was a golden opportunity to set up a concrete exercise in SCM capacity building of the CHSWTs in Bong, Lofa, Nimba, and Grand Cape Mount, as well as JDJ and Bensonville Hospital, all of which have received RBHS drugs.

In early April, RBHS and DELIVER met with the Supply Chain Management Unit (SCMU) of the Central MOHSW to discuss the mechanism of distributing the RBHS drugs to the health facilities. Since these drugs have been stored with the implementing partners, the first step will be to organize a stakeholders meeting including SCMU, NDS, the CHSWTs, the IPs, IRC,

Africare, MTI, and AHA, as well as RBHS and DELIVER. The principle will be to integrate the distribution of the RBHS drugs with vertical program drugs, which continue to be provided by NDS, and follow the MOHSW supply chain SOPs. The stakeholders meeting took place on 13-14 June in the Central Agriculture Research Institute (CARI) Compound, Suokoko, Bong County. SCMU, DELIVER, and RBHS conducted a 2 day meeting with key supply chain stakeholders including representatives of the CHSWTs of the 3 counties and implementing partners. It was agreed that IPs would support the county pharmacist and his team to gradually assume supply chain management responsibilities, including product quantification and distribution, LMIS, and product storage.

In recent months, partners halted the distribution of donated health products for the MoHSW to put in place appropriate control measures that ensure health commodity security and accountability. In response, the MOHSW developed a comprehensive safeguard mechanism endorsed by MOHSW & NDS Board and implementation plan named “Interim Approach” for commodities. The plan includes a top-up distribution approach within a 6 month period at all levels (central, county depot, and health facilities). While this approach is centrally managed, it was agreed that after a 6 month trial period, further efforts would be picked up to decentralize supply chain management.

Successes, challenges and constraints, and lessons learned

LMIS was rolled out in the 15 counties with partner support. The LMIS Tools are now used to capture commodity consumption directly from health facilities using the SBRR (supply balance and reporting tool). The SBRR data are entered at county level in an eSBRR Excel-based spreadsheet tool for capturing healthcare commodity consumption data and reported to SCMU at central level.

Many challenges continue to exist and must be addressed in the next 6 months:

- Problems of timeliness and incompleteness of reports from the counties
- Counties lack depot-specific data entry clerks for LMIS
- Insufficient availability of reporting forms in the field

Highlights of planned activities for the extension period

- Transition from the “Interim Approach” to decentralized county-owned supply chain management
- Mentoring of the pharmacists in each of the 3 FARA counties
- Implementation and monitoring of LMIS
- Quantification of the iCCM drugs

BB5: HEALTH SYSTEM FINANCING

The long term vision for Liberia’s health system is sustainable universal coverage. Health insurance offers the potential to realize this by establishing a domestic financing framework for healthcare that moves the country from donor-dependence, improves

access and quality of service, and provides financial risk protection for all Liberians. This is not an overnight solution, but one that will likely take a decade or more of consistent hard work to achieve. It is a difficult undertaking that will be realized only through the sound foundation of broad-based consensus, informed application of technical design aspects and careful consideration of Liberia's political, economic, and socio-cultural environment. RBHS has been requested to provide technical assistance to the MOHSW to aid on the path to implementing an achievable, tailored health insurance framework for the country.

Activities and Results

RBHS started work on health insurance in early 2013 with some feasibility groundwork including an assessment of the current situation related to health insurance and reviewing and proposing various mechanisms for health insurance provision. RBHS identified a small consulting agency called the Institute for Collaborative Development (ICD), specializing in health insurance in low and middle income countries. ICD has assisted governments in developing national health insurance schemes in Bangladesh, Ghana, the Philippines, Rwanda, and other countries. A sub-contract was set up and approved by USAID in early June 2013.

Led by Yogesh Rajkotia, a team of ICD consultants developed a concept paper called "Universal Health Coverage in Liberia: Design Options and Roadmap." This document calls for changing the rationale for the establishment and design of a health insurance scheme. It should place less focus on implementing one or other classic insurance model (social health insurance, community-based health insurance, etc) and be seen as a driver for broader health system reforms that would include increasing pre-payments for health, building up social solidarity and equity by pooling all revenues for health into a single fund and leveraging the large pooled fund to improve health system efficiency, particularly by shifting from paying for inputs to purchasing outputs and performance. Through this mechanism, power is transferred from the provider to the patient. In order to have access to funds, providers must provide quality care to patients.

Liberia has had a moratorium on user fees in place for some time, however this has done little to reduce real out of pocket payments at the point of care. The proposed system will introduce annual pre-payment for health services and will abolish and ban all fees (official and unofficial) at the point of care for the insured. User fees may be charged for the uninsured for health services that would not be funded in full by the government budget in order to incentivize the uptake of insurance membership. The proposed design of the health insurance scheme maintains a pro-poor perspective. In this case the poor would be protected by government subsidies for their health insurance premiums. This combination of mechanisms will improve the targeting of government subsidies to the poor. Those who are members of the insurance system will benefit from a defined package of services.

The concept paper was further explained and debated at a workshop attended by the senior management of the MOHSW in August 2013. During this workshop, a series of design options were proposed covering the following areas:

- Design approach: Big Bang versus Incremental
- Functions:

- Revenue generation: various sources to be defined
- Pooling: a single pooled fund versus multiple separate funds
- Strategic purchasing: various service packages
- Structural choices
 - Institutional setting: autonomous government agency versus public or private corporation
 - Provider payment: fee for service versus case payment versus capitation

These options were then debated and for each option, international experiences were presented. At this stage of the development of the health insurance scheme for Liberia it was important to bring all stakeholders to the same level of understanding and to start building consensus on various design options as well as the way forward to implementation.

In October 2013, the MOHSW with support by RBHS organized a high level stakeholders meeting to build a national consensus on the way forward for health insurance in Liberia. The meeting took place at the MOHSW and was chaired by the Minister of Health, Dr. Walter T. Gwenigale. Other key stakeholders attending included the Deputy Minister of Finance, the Minister of Transport, the Deputy Minister of Commerce, the chairpersons, standing committees on health from the Senate and House of Representatives, and representatives of the private sector. Also present were most MOHSW senior managers, WHO, and USAID. Technical assistance was provided by two consultants of the Institute for Collaborative Development, Dr. Yogesh Rajkotia, and Mr. Erik Josephson.

While many proposed design features will need further endorsement by the government, there was a general agreement that Liberia will pursue Universal Health Coverage via a comprehensive health insurance system funded through a series of revenue sources including the general budget, various taxes, donors, corporations, and individual premiums, covering the whole population from the beginning (the so-called "Big Bang approach"). A single pooled fund will be established and managed by a public entity. The fund will be called the "Liberia Health Equity Fund" (LHEF) and will be branded as such. Finally, purchasing will employ a mix of mechanisms including capitation, case payment, and fee for service depending on the facility type. The initial focus will be on the government health services and those private health providers that can be easily regulated.

In the weeks following the October meeting, a roadmap was developed to implement the proposed health insurance design. Both the design and the road map were presented for further validation at the Health Stakeholders Coordination Committee (HSCC) on 10 October and at the National Health Review Conference on 15 October.

Successes, challenges and constraints, and lessons learned

The development of a national health insurance system for Liberia is a top priority for both the Government of Liberia and USAID. President Ellen Johnson Sirleaf has clearly expressed her desire to find mechanisms that would allow Liberians to access health care at a reasonable cost. Minister of Health Dr. Gwenigale in his opening speech at the stakeholders

meeting stated that the LHEF would be his legacy. USAID noted that their “front office” is tracking the universal health coverage developments closely. The initial work of consensus building on the design options of the health insurance system has been a strategic success. Not only have the principal stakeholders agreed on the way forward, but the adopted system for Liberia is quite compatible with the principles of universal health coverage as proposed by WHO and more recently by the World Bank.

Obviously, the road to universal coverage is long and full of hurdles and challenges to overcome. Many questions remain. One of these questions is regarding the institutional setting for the single pooled fund. Should it be a new entity or an add-on to an existing corporation? Is domestic capacity available to manage the LHEF? Also, how will the necessary financial resources be collected? Finally, the proposed system will profoundly change the modus operandi of the current health service delivery system. Active purchasing is a new paradigm, intended to change the relationship between the provider and purchaser, and between the patient and provider. These changing relationships will require significant management. While high-level stakeholders are convinced that the way chosen is the right one, the population at large needs to understand and support the proposed system. Advocacy and communications are both critical and highly sensitive. It will require the specific expertise in communications in the coming months as well as a strategically appropriate advocacy plan.

Highlights of planned activities during the extension period

RBHS will support the MOHSW in the following Health Insurance Roadmap activities:

- Establishment of health insurance coordination mechanisms
- Preparation, submission, and approval of health insurance legislation
- Clarification and projections on potential revenue streams for the LHEF
- Detailed costing of LHEF
- Identification of an appropriate institutional setting for LHEF and development of its governance structure
- Organization of Study Tours to one or more countries by representatives of the LHEF stakeholders
- Development of a strategic advocacy and communications plan and organization of various advocacy meetings.

BB6: GOVERNANCE AND LEADERSHIP

Activities undertaken and results

Internal communications was identified as a significant gap in the central Ministry capacity assessment. RBHS, with the help of a JSI Communications Advisor, conducted a situational analysis and identified four major aspects of a strategy for improved internal

communications: (1) develop and strengthen the telecommunications infrastructure; (2) establish an internal communications unit in the MOHSW; (3) develop a set of standard operating procedures that provide guidance on what to communicate to whom, when and how; and (4) set up a culture change initiative that would shift the MOHSW toward a culture of information sharing.

A small working group was appointed by the Deputy Minister administration to move these strategies forward. The consultant will return in November 2013 to work on SOPs and to advise the unit. Internal communication was also identified as a need and interest at NMCP and that will be part of the advisor's Terms of Reference.

At the county level, the RBHS field staff has been able to initiate and/or reinforce the convening and documenting of routine meetings of CHSWTs and in some cases, CHSWBs. The very successful work at the district and community levels to strengthen the CHDCs and DHCs may also have some upward effect on the CHSWBs.

An activity that was not anticipated in the work plan was an organizational capacity assessment of the National Malaria Control Program. This request by the MOHSW and USAID has been responded to through a modification of the Capacity Assessment undertaken at the central and county levels. Individual or team interviews were conducted with every division of the program and a longer, cross-cutting questionnaire completed by the Program Director. The preliminary results suggest that NMCP has, for the most part, qualified staff who do not always feel sure about their work and often feel disconnected from the bigger picture of the national program. The program is heavily donor driven, with funding from GFATM and the U.S. Presidential Malaria Initiative. The location in the old MOHSW building, the architecture of the building and the lack of communications infrastructure exacerbates this lack of connectedness within the program and between the program staff and the central Ministry. Though a detailed analysis is yet to be completed, there is preliminary agreement that the program staff could benefit from an off-site retreat focusing on shared vision; strategic thinking; role clarification; teamwork; and work planning. There is also keen interest on the part of the leadership to develop standard operating procedures for internal communications. The NMCP communications plan will be part of the TOR of the JSI Communications Advisor in November.

Other leadership and management development activities were rolled over to the final project year due to the delayed arrival of the Capacity Building director and other pressing issues at the time of her arrival.

Successes, challenges and constraints, and lessons learnt.

MOHSW has many successful partnerships and works hard to take advantage of all of them. This often creates an abundance of ideas, strategies, roadmaps and reports. RBHS has learned that intermittent short-term TA that is brief and focused can be followed up by RBHS and MOHSW staff to ensure that key action steps are taken prior to a consultant's return. In the case of the Internal Communication Strategy, it was important that the

Deputy Minister of Administration appointed a focal person and engaged a small group from many departments to move this forward. Failing this focused follow up by MOHSW and RBHS, competing priorities easily fill the time that busy officers have available for new initiatives, important though they are.

This approach has contributed to movement on the Internal Communication Strategy and has also been successfully used with DHIS, iHRIS, M&E, BCC and Professional Development of the Training Institutions. Lack of follow up resulted in county level PBC guidelines laying dormant for several months, which will require additional time and strategizing to move forward.

Highlights of planned activities for the extension period

Over the following months, RBHS intends to complete several activities in the Leadership and Governance area including:

- Completion of the Capacity Assessment of the NMCP and development of a strategy; offsite retreat for NMCP staff for teambuilding, strategic thinking, work planning and role clarification
- Supporting MOHSW in two key elements of the Internal Communications Strategy: Standard Operating Procedures and Creating a Culture of Information Sharing MOHSW is exploring the possibility of GEMS collaborating on the Culture of Information Sharing as a change management project within their overall mandate to strengthen the ability of government ministries to lead and manage change
- Completing a Leadership Competencies Assessment and curriculum for mid level managers at the central and county levels
- Promoting a more integrated, simultaneous review of health indicators and capacity building indicators per county.

Intervention 2.2: Strengthen MOHSW systems and human capacity at county level in Bong Lofa, Nimba

At the county level, as at the central level, RBHS focuses on capacity building in each of the six WHO building blocks. During Year 5, RBHS worked with each county to develop an operational plan for capacity building. The plan was derived from the county's strategic plan developed to respond to the findings of a quantitative and qualitative capacity assessment. The activities and results described below were achieved through careful collaboration between MOHSW and RBHS at central and county levels. The county level achievements were often driven by centrally-led technical activities, e.g., county level training in family planning or BCC. The counties and RBHS county staff often were ahead of the center, seizing opportunities to strengthen performance appraisal or working on CHSW Board development. In all cases, the RBHS staff, resident in the counties, helped move processes along and were available for follow-up, coaching, mentoring and technical

support after training interventions, central supportive supervision visits, and other initiatives.

Activities undertaken and results

Major activities and key results are highlighted here by building block and unless otherwise noted, apply to all three counties.

Building Block 1: Delivering Essential Health Services

Earlier sections of this report described the major county level activities that were initiated by the central Ministry and RBHS. The field presence of RBHS Capacity Building Officers (CBOs) and Monitoring and Evaluation Officers (MEOs) enabled on the spot follow up and support of these efforts. Specific interventions were described under Intervention 2.1 and this section highlighted those results that were achievable due to the presence of county staff.

- CHSWT members, superintendent's staff, and implementing partners began **to use the PBF management tool** to monitor achievements and gaps in all PBF indicators. Each county now has a PBF Steering Committee that meets to validate PBF invoices submitted by implementing partners. The quality and regularity of the review varies but the practice has begun. When the central PBF staff made monitoring visits, they shared their findings and expected corrective actions with CBOs, MEOs and CHSWTs, enabling them to work together to follow up at the facility, county and Steering Committee levels. Nimba County has also rolled out training in the PBF management tool to the DHOs.
- **Quality Improvement teams from the four counties** (FARA counties and Grand Bassa) participated in the Improvement Collaborative (IC) demonstration sites and have completed their baseline assessments. The first learning session, bringing together the four teams, indicated that the teams were already making quality improvements in areas that are within the control and means of the hospital. For example, in Nimba county, infection control measures were put in place, including refresher lessons for housekeeping staff and the purchase of basic equipment translating to low cost and high potential impact. For three of the four sites, the leadership at the hospital level was sufficient to create and form a team, develop action plans for gathering the baseline data, and document QI meetings and results. The fourth team in Lofa county required more support from the county CBO and RBHS QA Advisor to move through and beyond internal issues to set up the team and establish a baseline. All four teams derived lessons from the Learning Session and developed action plans for coaches and team members. The Learning Collaborative process reviews status against standards: analyzing gaps; identifying solutions; planning for their implementation; assessing the results of the implemented solution; and maintaining or modifying the new approach as appropriate. This process is the same as the one encouraged in the "data for action" model promoted by HMIS/M&E. It is also embedded in the Support Supervision process and modeled in the PBF management and monitoring practice.

- The **funding by the Global Fund for Supportive Supervision** at the County level has encouraged routine monthly supervision. The county level tools are being used; reports are being written in many cases; and facility ledgers indicate when visits took place. To be more effective, the supervision process, similar to the QI Collaborative described earlier, needs to assess the results of actions taken from a previous visit. This is only possible if reports are readily retrievable at the county and facility level. With assistance from the newly assigned MEO in Bong County, a new filing system was installed for supportive supervision reports, by district and facility. This has the potential to strengthen the supervision process as it enables teams to easily retrieve previous supervision reports and follow up on the completion and success of planned actions. This is another example of a low cost, high potential impact activity that responded to a need identified and addressed on site.
- Training, orientation and planning for **MNCH, Malaria, Family Planning, and Mental Health** were also undertaken with a view to strengthening individual and facility/county ability to deliver quality services in these areas. More details have been provided in the earlier sections of this report.

Building Block 2: Health Workforce

- Two of the three counties worked on improving the use of **performance appraisal** forms. They provided formal orientation to DHOs and OICs. The third has not completed a performance appraisal since 2009. The orientation process focused on the appraisal tool currently in use by MOHSW and has not yet been expanded to include the broader concept of performance management introduced by CSA in March 2013.
- All three counties have begun to document the **in-service training** completed by health workers and entering that data into an Excel spreadsheet. Work is underway to create a module within the integrated Human Resources Information System (iHRIS) to capture that information.

Building Block 3: Health Information System

M&E staff in the three counties were trained in **DHIS 2**, and supported by the RBHS MEOs, they have demonstrated their ability to verify and upload data; retrieve and analyze data from the system; and prepare simple graphics highlight performance and trends in key indicators. Several trainings were conducted by RBHS and MOHSW central staff with the help of an international consultant. The follow up of the training was ensured on site by the RBHS MEOs assigned to each county, enabling county teams to get on the spot assistance with data entry, verification and use. MEOs also participated in the **FARA data counter verification visits**, and worked with the county M&E staff to **improve the quality of data** from the facilities.

Building Block 4: Access to Essential Commodities and Infrastructure

DELIVER has conducted training on **new supply chain guidelines** and RBHS staff joined their county colleagues in the training. Facilities are now more accurately and consistently reporting on drug consumption via the SBRR (LMIS tool) and via in the drug supply section of the monthly HMIS submission. One county reported that the improved system has resulted in improved drug distribution, with drugs being delivered timely to 98% of the facilities.

Building Block 5: Health System Financing

In the area of health system financing, a planned first step at the county level was to support the MOHSW Office of Financial Management in **rolling out a computerized accounting system**. Bong County has made the transition early on. The ledger, cash book, and journal are now electronically formatted, making financial transactions much easier and more accurate not only for the County Management Team, but also for both internal and external auditors. The transition also brings to some extent an acceptable standard of accounting principles, is cost both effective and time saving, and contributes to transparency. Two of the basic characteristics of any good accounting system are transparency and accuracy.

Building Block 6: Leadership and Governance

At the county level, leadership and governance activities have focused on **routine internal communication among the CHSWTs**; activation of the CHSWBs; outreach to communities and the formation of community structures to liaise and advocate between community and facility levels; and improved communication with the central MOHSW. The progress in the counties has been somewhat uneven. Routine CHSWT meetings on a weekly or monthly basis are increasing and in Nimba county, partner meetings are held regularly and all meetings are documented with minutes. Lofa county held its first CHSWB meeting and is the first of the FARA counties to do so. The previous section on Community Health and BCC describes the establishment of demonstration sites in Bong county, where local leaders and communities are guided on how to better communicate with the health facility and with the CHVs.

Successes, challenges and constraints and lessons learned

The achievements described above are the result of strong technical leadership and programming from the center, and equally strong follow up and support on a daily basis through the RBHS county staff. While the technical leadership of the program is provided by specialists, the RBHS county teams are composed of individuals who complement each others' skills and have a range of skills needed to support county capacity across many dimensions. Their full time presence in the counties promotes the kind of working relationships that make it easy for CHSWTs and other health workers to seek support and assistance. These relationships also help the county teams know where, when and how to balance the need to produce results with the drive to build capacity. The role of the county teams will be explored more fully as part of the overall review of RBHS strategy as the project winds down and will be a focus of the transition planning.

There have been some systemic challenges that have arisen over the course of the past year that have affected the capacity building goals at the county level. Among these have been the challenges in engaging the Office of the Superintendent in the establishment of CHSWBs. There is uneven interest and some lack of clarity in the constitution and TORs of the boards. At the same time, the formation of PBF Steering Committees can provide opportunities to more actively engage a range of civic leaders in the process of monitoring, advocating and supporting improved delivery of health and social welfare services.

The timing and pacing of centrally led activities (RBHS or MOHSW) often creates scheduling conflicts in the counties and intense time pressures on staff of counties and of RBHS. Better coordination and scheduling will be needed to address this situation, especially in RBHS' final year.

Lack of internet access, a nationwide challenge and even present within the MOHSW headquarters, challenges communication with the counties. County M&E staff has had to travel to Monrovia to enter routine HMIS data, taking them away from their posts for weeks and in some cases months at a time. The Ministry is making some headway on this but the challenges remain, impacting all communication between the central and county offices.

Highlights for planned activities during the extension period

The next 8 months will see a flurry of activity, to complete additional activities as described in previous sections of this report. In addition, RBHS will undertake a focused review, with county partners and the Capacity Building Core Group at the central Ministry, to identify practices that promote capacity development and practices of TA providers that might actually hinder capacity development.

RBHS will further clarify and strengthen the role of the RBHS county staff in supporting capacity building at the county level. In many ways, these staff members, as adjuncts to the county teams, provided pivotal support to counties on an almost daily basis. Their ability to identify areas where their support and engagement could make a difference and their ability to move in has been recognized by CHOs and CHDDs in the counties. This "embedded," long-term TA, responding to specific and emerging needs of the county team, presents some lessons on capacity building. RBHS will work on ways to capture and document the knowledge, skills and dispositions needed to this effectively, and gather feedback from the counties on this hypothesis.

RBHS will also repeat the Capacity Assessment that was conducted in 2012 to measure perceived changes in capacity and to work with counties to develop what might become a TOR for capacity building by their contracted partners and donors.

Intervention 2.3: Strengthen Professional Health Institutions, including TNIMA, EBSNM, LBNM, and LMDC

Activities undertaken and results

Quarterly monitoring and supervisory visit clinical sites and training institutions

In an effort to strengthen the Liberian Board of Nursing and Midwifery's ability to institutionalize quality improvement at training institutions for paramedical professionals, RBHS assisted the LBNM to monitor and evaluate adherence to effective teaching skills at 14 training institutions and clinical sites. Quarterly external assessments were completed utilizing the National Pre-Service Education Standards at all training institutions implementing the updated curricula.

Quarterly Education & Training National Working Group meetings (ETNWG)

In collaboration with the Training Unit, four quarterly ETNWG Meetings were conducted with 40-46 stakeholders and instructors in attendance at each meeting. During each of these meetings, successes and challenges that were identified by each working committee at various training institutions were addressed. An Education Development Committee/Quality Assurance Committee was established at each training institution implementing its responsibilities.

Strengthen professional boards to function as regulatory bodies

Students' performance assessment training was conducted for 30 participants from twelve training institutions, LBNM, LMDC, LAPHT, PA association and MOHSW. Facilitation was provided by STTA Rosemary Kamunya. During the training, participants were taught to continue to improve performance assessment for students and graduates of various health training programs using current evidence-based methods and best practices consistent with established educational standards. By the end of the training all of the participants were able to apply the concepts of measurement and evaluation to the formative and summative assessment of students and construct high quality test items designed to measure basic knowledge and clinical decision making skills.

Increase capacity of training institutions to provide effective trainings

In continuation of earlier the strengthening process at these training institutions, Buruli ulcer effective teaching skills (ETS) workshop was held to enhance the abilities of instructors to utilize appropriate teaching methods in teaching others. 27 participants from 13 training institutions, LBNM, LMDC and the Training Unit of MOHSW, actively participated in the training. By the end of the training, each participant gave a presentation and a demonstration using ETS techniques such as developing learning objectives before teaching, plans for teaching, preparation and use of visual aids/multimedia to promote learning and preparation and delivery of interactive presentations.

Blended learning methodologies workshop

The Blended Learning Methodologies Workshop was conducted for 23 faculty and preceptors from nine training institutions; LBNM, LMDC and MOHSW. STTA Catherine A. Carr served as lead facilitator in conducting the workshop. The focus of the workshop was on the integration of a range of training methodologies in the classroom and at the clinical training sites.

SBMR Module 3 workshop

Standard Base Management and Recognition (SBMR) Module 3 workshop was conducted for 40 participants from training institutions, MOHSW and regulatory bodies. Dr. Emmanuel Otolorin, STTA, served as the lead facilitator. By the end of the workshop, participants were able to analyze the results, identify and prioritize persistent performance gaps, identify appropriate interventions, including exchange of best practices through benchmarking, identify strategies for scaling up the initiative, identify strategies to reward achievements and institutionalize the process, identify mechanisms to further involve the community in the process and develop a strategy for institutionalizing and scaling up the initiative.

Skills lab management workshop

Managing clinical practice for skilled lab instructor's workshop was conducted for 23 participants from 12 training institutions and regulatory bodies. STTA, Lastina Lwatula, served as the lead facilitator during the training. At the training, participants were trained to assist with the management of the simulation lab toward increasing students' opportunities in developing clinical competency in standardized tasks in a simulated setting. By the end of the workshop, participants were able to assign roles and responsibilities to staff as it related to the function of the simulation center, list materials, equipment and supplies needed including locally available materials, prepare schedules for use of the simulation lab, and develop learning objectives and outcomes that could be achieved in the simulation.

LMDC monitoring tools were developed

As requested by LMDC, RBHS went entered a 1 month consultancy agreement with two local consultants, Dr. Moses Galakpai and Abraham K. Johnson to provide technical assistance to LMDC in the development of three standardized monitoring tools (Hospital, Health Center & Clinics) to be utilized by LMDC to improve the quality of health services. Upon the completion of these documents, a validation workshop was held with 30 participants (Doctors, PA, RNs & RMs). By the end of the training, these monitoring tools were validated and accepted by the LMCD to be used to assess both privates and public facilities nationwide.

Provided support to update and computerize the professional database

RBHS purchased several pieces of equipment and supplies for setting up a computerized data base for the LBNM. The professional database at the LBNM is well populated with information for all nursing and midwives who have passed the state board exam.

Development of EHT curriculum

In continuation of efforts to promote effective implementation of the EHT curriculum, a workshop was held to develop the “Manual of Course-Related Classroom, Laboratory and Field Activities for Training Environmental Health Technicians: A Guide for Faculty.” During the workshop, course sequencing was reviewed, all procedures for EHTs per the course syllabus were identified, and materials to be used in all procedures were listed, as well as checklists for students to acquire a specific set of skills and for teachers to use for student performance assessments. A total of 75 copies of the EHT curriculum were printed and distributed.

EHT faculty and the steering committee members participated in a workshop to develop the EHT Logbook and Procedure Manual. At the workshop, essential procedures were identified and developed into checklists to be used as a teaching and learning document for performing and assessing the skills of students in carry out procedures.

Development of inter-disciplinary procedures manual

In an effort to promote quality performance improvement and effective implementation of the curricula developed by RBHS, the MOHSW and relevant stakeholders, an Interdisciplinary Procedures Manual (IPM) containing checklists for performing essential procedures and assessing competency of three cadres of students (RNs, RMs & PAs) was developed. A total of 250 copies have been printed and were disseminated to all accredited training institutions.

Equipment and associated materials were provided to TNIMA and EBSNM for skills labs, computer labs, and libraries

Assorted laboratory equipment was provided for setting up the EHT Water Lab at TNIMA. A variety of textbooks and associated materials, including several simulated center materials and supplies to be used by PA, RN & RM students, were donated to TNIMA and EBSNM to strengthen the learning environment.

Successes, challenges and constraints, and lessons learned

All training institutions are now using the revised curricula and the pre-service education performance standards to improve the training of mid-level health care providers, the teaching skills of instructors and clinical preceptors, the educational environment at learning institutions, and health facilities serving as clinical sites.

TNIMA and EBSNM now are well equipped and designed simulation laboratories for students to demonstrate skills.

The number of students in each class at TNIMA and EBSNM has been reduced to a maximum of fifty according the standard. Instructors of clinical courses are now taking their students to the clinical sites to supervise them along with the clinical preceptors, to ensure that what is taught in the classroom is in line with what is practiced at the clinical sites. Instructors are also using the updated curricula to preparing their lesson plans and course outlines. Due to the use of the checklist during demonstration in the simulation lab, students’ performance has improved.

LMDC has three standardized monitoring tools (Hospital, Health Center & Clinics) to be utilized in assessing health facilities to improve the quality of health services.

LBNM is now issuing a computerized license to all nurses and midwives who have passed the state board exam or are due for renewal.

Highlights of planned activities during the extension period

- Strengthen TU to be able to function as intermediary between the counties and the training institutes
- Increase the information systems capacity of professional training institutions and boards
- Enable the regulatory body to effectively implement its functions as a licensure authority by providing a process and structure for continuous professional development (CPD), focusing on medical doctors and medical laboratory technicians
- Strengthen accreditation process by regulatory bodies

Monitoring and Evaluation

Revision of M&E plan and indicators

In the beginning of year 5, RBHS has finalized the revision of the monitoring and evaluation plan based on the revised project description approved by USAID Liberia. RBHS developed a revised results framework with two intermediate results. As RBHS now focuses on capacity building, the revised M&E plan has aimed to expand the indicators on capacity building. In line with the scope for the revised M&E plan, some of the indicators were dropped and some new indicators were added. The USAID reportable indicators were also revised. Two tables were developed; one is the general M&E table that shows a list of indicators with numerator and denominator definitions, baseline values, current levels values, and end of project target values, as well as data sources; and the other is the performance monitoring plan table (PMP) that elaborates on the M&E plan by giving annual targets and providing space to update the achievements annually. There are 13 core indicators that are in line with USAID, GHI and MOHSW M&E indicators. These indicators represent service delivery and health system performance indicators. The rest of the indicators were organized by IR and intervention area.

Project Monitoring

RBHS has closely monitored the implementation of the Year 5 work plan. Regular monitoring meetings have been scheduled with program and capacity building advisors of the central RBHS team. RBHS has also organized bimonthly meetings with county-based staff to discuss progress made in the implementation of the county plans. Finally, in April

and May, meetings were organized with USAID to review the progress of the Year 5 work plan.

Evaluation

Most end-of-project evaluation activities scheduled were postponed because RBHS was extended for another year. Deirdre Rogers, the RBHS Boston-based M&E Advisor, visited Monrovia in September 2013 to work with the team on the extension work plan and on protocols for the various evaluation studies.

At the end of this project year, RBHS M&E staff studied the results of the RBHS indicators generated for the period of July 2012 to June 2013 and compared them to the results from the previous year. These data have been captured in Annexes 1A and 1B.

Preliminary results from the Liberia Demographic and Health Survey 2013 were released in October 2013⁷. Some rather encouraging results are as follows: Facility Deliveries increased from 37% in 2007 to 56% in 2013; Infant Mortality decreased from 72/1000 to 54/1000; Contraceptive Prevalence increased from 11% to 19%, and Stunting in children under 5 decreased from 39% in 2007 to 32% in 2013.

Table 3: Preliminary results from LDHS 2013

SN	DHS Indicators	DHS 2007	DHS 2013
1	Total Fertility Rate	5.2	4.7
2	Infant mortality per 1,000 live birth	72	54
3	DPT/Pentavalent 3	50	71
4	CPR for (modern methods) (%)	11	19
5	ANC1 (%)	79	96
6	Facility delivery (%)	37	56
7	SBA (%)	46	61
8	IPT2 (%)	45	48

Documentation

Most documentation activities have also been postponed to the extension year. Throughout the year RBHS has responded to requests from USAID to produce relevant success stories.

⁷ Liberia Demographic and Health Survey (LDHS) 2013

Project Management, Finance, and Administration

Project management and administration focused on the support to all technical staff for the implementation of the Year 5 work plan. The major activities included:

Human Resources

RBHS has had a few changes in staffing during this reporting period.

Some additional recruiting and hiring occurred as a result of new positions or previously open positions due to the departure of a staff member. These changes have been captured in the updated RBHS organizational chart (see Annex 5). Following is a list of these positions:

- Capacity Building Director left in December 2012 and was replaced in May 2013
- Two Drivers hired for the two new vehicles that arrived in October 2013
- Monitoring and Evaluation Assistant was hired
- Capacity Building Officers for Lofa County were hired
- Monitoring and Evaluation Officer for Lofa County was replaced
- Data Management Assistant was hired
- Executive Coordinator was replaced
- Monitoring and Evaluation Officer for Nimba County is being hired
- HIV/AIDS and TB Advisor left and a new Maternal Health and AIDS Advisor is being hired

Procurement

Pharmaceutical procurement

As reported in the semi-annual report, RBHS received and delivered to the MOHSW implementing partners, per MOHSW request, a total of 11 pharmaceutical containers and several air shipments related to the procurement order of essential medicines #5 for 134 health facilities which included facilities in Bong, Grand Cape Mount, Lofa and Nimba counties as well as EmONC drugs for 2 facilities in Montserrado county.

RBHS also worked on the drugs quantification, request for quotation and purchase order for the procurement of essential medicines #6 for 112 health facilities which include facilities in Bong, Lofa and Nimba counties as well as 2 facilities in Montserrado County. We have already received 9 pharmaceutical containers and several air shipments related to this procurement order. We are still waiting for 3 additional containers which should be received in the next few weeks.

Major procurements

Below is a list of some of the major procurements completed during this reporting period:

- Printed 200 copies of graduation souvenir program for EBSNM November 2012 graduation
- Printed one billboard to support the United Against Malaria campaign in November 2012
- Printed 3000 copies of brochures to support the District Contraceptive Day
- Printed and distributed 200 t-Shirts, 200 caps and 5000 bumper stickers in support of “A Promise Renewed” campaign
- Supported the production of maternal motility reduction theme song
- RBHS sponsored the airing of BCC messages on “Take Cover” to seven community radio stations in Bong, Nimba and Lofa Counties and one radio station in Monrovia
- RBHS sponsored the airing of BCC messages on “Baby by Choice” to seven community radio stations in Bong, Nimba and Lofa Counties and one radio station in Monrovia
- Procured one AutoCad architectural design software for MOHSW Infrastructure unit
- RBHS procured IT equipments in support of MOHSW Health Conference in October 2013
- RBHS provided funding to the LBNM for the procurement of internet equipments and 20 GB internet subscription for 12 months
- RBHS procured 2000 watts UPS and a wireless router (D-Link) for MOHSW iHRIS Server
- RBHS provided funding for the ODI Consultant supporting health financing at the MOHSW

Training

The RBHS Admin/Finance team has managed the logistics and finances for all the RBHS trainings mentioned in the technical sections. A list of training activities organized can be found in Annex 4.

Budget vs. Expenditures

Annex 6 gives a summary of estimated expenditures until 31 October 2013. It should be noted that accruals have not been included.

Visitors and Consultants

The Project hosted visits from JSI, RBHS partners and consultants as well sponsored MOHSW staff to participate in training, meeting and conferences during the reporting period, as shown in Table 4.

Table 4: International visitors and Out-of-Country visits October 2012-October 2013

Name	Organization	Dates	Location of Travel	Purpose
Jacob Hughes	RBHS	Oct 8-20, 2012	Liberia	Travel to support the National Health Conference
Frank Baer	RBHS	Oct 8-20, 2012	Liberia	Travel to support the National Health Conference
Theo Lippeveld	RBHS	Oct 22-Nov 2, 2012	USA	Travel US for APHA Conference
Vamsi Vasireddy	RBHS	Oct 25-Nov 4, 2012	USA	Travel US for APHA Conference
Dr. Dahn	MOHSW	Oct 26-Nov 2, 2012	USA	Travel US for APHA Conference
Louise Mapleh	MOHSW	Oct 26 - Nov 4, 2012	USA	Travel US for APHA Conference
Teta Lincoln	MOHSW	Oct 12 - 28, 2012	USA	Travel to Boston for QA short course
Catherine Gbozee	RBHS	Oct 12 - 28, 2012	USA	Travel to Boston for QA short course
Tom McHale	RBHS	Nov 3-21, 2013	Liberia	Travel to provide support to the F&A
Angie Lee	RBHS	Nov 7-19, 2013	Liberia	Travel to start the develop PBF Management Tool
Deidre Rogers	RBHS	Dec 9-21, 2012	Liberia	Travel to provide M&E support
Mary Carnell	RBHS	Jan 06-18, 2013	Liberia	Travel to provide TA to Community Health Division
Amy Kravitz	RBHS	Jan 5-14, 2013	Liberia	Travel to support Capacity Building activities
Judith Oki	RBHS	Jan 25 - Feb 23, 2013	Liberia	Travel to support Capacity Building, HR activities
Charlesetta Neor	MOHSW	Jan 30 - Feb 18 2013	Ethiopia	Travel to a Regional M&E course
Gonleyen Dahn	MOHSW	Jan 30 - Feb 18 2013	Ethiopia	Travel for a Regional M&E course
Stephen	MOHSW	Feb 2- 9, 2013	Tanzania	Travel for an iHRS

Name	Organization	Dates	Location of Travel	Purpose
Gbanyan				course
Sanford Wesseh	MOHSw	March 18-30, 2013	India	Travel for a Regional Impact Evaluation workshop
Angie Lee	RBHS	Mar 25 - Apr 6, 2013	Liberia	Validate and train on PBF Managements
Jean Kagubare	RBHS	April 1-6, 2013	Liberia	PBF consultation meeting
Wendy Abramson	RBHS	April 17- May 1, 2013	Liberia	Contracting guidelines
Joe Moyer	RBHS	April 7-10, 2013	Ghana	Inspect Pharmaceutical Warehouse
Emmanuel Otolorin	RBHS	May 6-10, 2013	Liberia	SBMR module 3 training
Andrea Dickson	RBHS	May 20-31, 2013	Liberia	Communication Strategy
Rosemary Kamunya	RBHS	June 2-8, 2013	Liberia	Student Performance Assessment workshop
Bill Brieger	RBHS	June 9-14, 2013	Liberia	Operationalize IPT2 new guidelines
Stella Babalola	RBHS	June 30 - July 5, 2013	Liberia	Training on M&E SBCC intervention
Laura McEvoy	RBHS	July 6-12, 2013	Liberia	USAID Financial Review
Catherine Carr	RBHS	July 10-20, 2013	Liberia	Blended learning workshop
Salwa Bitar	RBHS	July 28 - Aug 10, 2013	Liberia	QA support
Lisa Pelcovits	RBHS	July 29 - Aug 10, 2013	Liberia	QA support
Romain Tohouri	RBHS	Aug 5-23, 2013	Liberia	DHIS 2
Mercede Gasco	RBHS	Aug-13	Liberia	Work planning
Rodney Gbanyan	MOHSW	Aug 14-24, 2013	Tanzania	iHRIS training
Mariama Dassin	MOHSW	Aug 14-24, 2013	Tanzania	iHRIS training

Name	Organization	Dates	Location of Travel	Purpose
Lastina Lwatula	RBHS	Aug 13-17, 2013	Liberia	Managing Simulation center
Anna Helland	RBHS	Aug 11-16, 2013	Liberia	BCC support
Forkpa Flomo	FORECAST	August 14, 2013	Tanzania	Returning home after the training program
Deirdre Rogers	RBHS	Sept 10-21, 2013	Liberia	Workplanning
Daniel Somah	MOHSW	Sept 14-21, 2013	Ethiopia	PMI BCC partner training
John Sumo	MOHSW	Sept 14-21, 2013	Ethiopia	PMI BCC partner training
Marietta Yekee	RBHS	Sept 14-21, 2013	Ethiopia	PMI BCC partner training
Salwa Bitar	RBHS	Oct 21- Nov 2, 2014	Liberia	IC support

Program Subcontracts

Table 5 provides a cumulative summary of all active program subagreements and contracts

Table 5: Status of program subcontracts

Organization	Project Component	Type of contract	Current Status/Period	Amount
JHU/CCP	BCC	Subagreement	13 Nov 2008-31 Aug 2014	\$1,429,482
Jhpiego	Pre-Service	Subagreement	13 Nov 2008-31 Aug 2014	\$3,236,793
MSH	Capacity Building, PBF, Costing, QA	Subagreement	31 Mar 2009-31 Aug 2014	\$2,422,972
ICD	Health Financing	Contract	17 June 2013-31 Dec 2013	\$246,83.40
JPA - Nimba Health Facilities	Infrastructure	Contract	Ongoing	\$203,465.00
Mega – EBSNM electrical	Infrastructure	Contract	Ongoing	\$225,944.00
West Construction – Nimba Health Facilities	Infrastructure	Contract	Ongoing	\$167,030.00
Mass Design Building	Infrastructure	Contract	Ongoing	\$463,730.00

Table 5: Status of program subcontracts

Organization	Project Component	Type of contract	Current Status/Period	Amount
Standards				
SEEK Engineering	Infrastructure	Contract	Completed Under warranty	\$15,792.00

Challenges and constraints: Finance and administration

Project Extension

RBHS worked on a request for a one year extension of the RBHS project. While the process took a bit of time, it went very smoothly. USAID was very responsive and supportive throughout the process.

Conclusions and Future Directions

In Year 5, RBHS continued to work on various program interventions including (1) increased access to comprehensive MNCH interventions; (2) increased uptake of critical malaria interventions; (3) increased access to quality HIV/AIDS services; (4) increased access to comprehensive family planning (FP) and reproductive health (RH) services; and (5) finalizing infrastructural work including environmental interventions.

But Year 5, after a year of capacity assessment and strategic planning, was the first year of actual capacity building interventions both at central as well as at county levels. While the overall effort of capacity development in the six building blocks is massive and needs more time for sustainable results, substantial progress has been made in several areas addressing individual, organizational, and system capacity. Some examples given below are: improving service delivery through performance based financing (PBF) and the use of in-patient standards; integrating the community health and health promotion divisions; developing the integrated Human Resource Information System (iHRIS); strengthening the Health Management Information System (HMIS); moving forward on Internal Communications; and supporting the development of a National Health Insurance System.

The establishment of the PBF Unit of the MOHSW started in July 2011. Initially most of the time was spent on strategic planning and tools development. After three initial quarters with no significant improvement in PBF indicators, the last five quarters (up to June 2013) posted a **steady improvement in PBF service delivery indicators**. Despite being relatively new, the PBF unit is now often solicited to contribute to other MOHSW initiatives, such as assessment and planning of the counties capacity for contracting, especially as the MOHSW gradually moves from contracting out to contracting in the delivery of health services (organizational and individual CB).

Enormous work in the past year has gone into **the development of in-patient standards** for various service delivery clusters. The standards have been rolled out in four pilot hospitals and a first learning session was organized to share best practices and lessons learned (system and organizational CB).

As described in previous documents, one of the main problems of the central MOHSW is its fragmentation into multiple units and its lack of coordination between them. In the past year, RBHS successfully facilitated the **integration of the activities of the community health services and health promotion divisions of the MOHSW**, better defining the functions of each. While CHSD focuses on strengthening community structures, NPHD's focus is on behavioral change. The joint efforts undertaken in the demonstration sites have substantially increased the efficiency of both divisions (organizational CB).

Two aspects of the implementation of iHRIS stand out as lessons learned to apply out-of-country training for individual, organizational and systems benefits. The first was sponsoring training participants who were representatives of the various units that will start up, manage and maintain the system. The second was timing the support of the

technical assistance provider soon after three of the five had been trained. This timing allowed for immediate application and rapid identification of skills and concepts that were not fully mastered during the training program. The consultant, headquartered in Lagos continues to provide support at a distance and will return to assess the pilot and further develop the system with the team (system building and organizational CB).

RBHS has made significant progress in building individual, organizational, and system capacity of the HMER division of MOHSW, as well as of the county teams **to better use the information generated by the HMIS**. Particularly the problem solving workshops were very successful. Participants changed their way of thinking about the link between problem identification and solving. The workshops were well attended and appreciated by the participants. They really responded to an urgent need of CHTs for methodological support to their day to day decision making processes, in providing them with systematic knowledge and skills to problem solving. RBHS carefully documented all proceedings of the workshop and hopes to write a summary report after the Lofa workshop (individual and organizational CB).

The county and central level M&E and HMIS staff have developed capacity to use DHIS2 for data entry, analysis and producing various reports. HMER for the first time has held a DHIS2 demonstration to senior central MOHSW staff which was well appreciated and applauded. Also, both the uploading of population data to DHIS2 and the successful migration of DHIS1 legacy data to DHIS2 are great achievements facilitating the analysis and use of information (system building).

RBHS has learned that intermittent short term TA that is brief and focused can be followed up by RBHS and MOHSW staff to ensure that key action steps are taken prior to a consultant's return. In the case of the Internal Communication Strategy, it was important that the Deputy Minister of Administration appointed a focal person and engaged a small group from many departments to move this forward. Failing this focused follow up by MOHSW and RBHS, competing priorities easily fill the time that busy officers have available for new initiatives, important though they are. This approach has contributed to **moving forward on the Internal Communication Strategy** and has also been successfully used with DHIS, iHRIS, M&E, BCC and Professional Development of the Training Institutions.

The development of a national health insurance system for Liberia is a top priority for both the Government of Liberia and USAID. President Ellen Johnson Sirleaf has clearly expressed her desire to find mechanisms that would allow Liberians to access health care at a reasonable cost. Minister of Health Dr. Gwenigale in his opening speech at the stakeholders meeting stated that the "**Liberian Health Equity Fund**" (LHEF) would be his legacy. USAID noted that their "front office" is tracking the universal health coverage developments closely. The initial work of consensus building on the design options of the health insurance system has been a strategic success. Not only have the principal stakeholders agreed on the way forward, but the adopted system for Liberia is quite compatible with the principles of universal health coverage as proposed by WHO and more recently by the World Bank.

Year 5 also continued to show excellent achievements in service delivery as measured through HMIS data from July 2012 – June 2013 in the three FARA counties. These achievements are even more remarkable knowing that they cover all the facilities in the three counties (and not only those of the formerly RBHS managed facilities). Here are some examples:

- Deliveries in facility by a skilled birth attendant (SBA) went from 51% in Year 4 to 61% in Year 5
- Children under 1 Year who received Penta-3 vaccination went from 92% in Year 4 to 100% in Year 5
- Pregnant women provide with a 2nd dose of IPT for malaria went from 47% in Year 4 to 51% in Year 5
- Children under 5 treated with Artemisinin-based Combination Treatments (ACTs) went from 87% in Year 4 to 91% in Year 5
- Couple-years of contraceptive protection (CYPs) went from 21,949 to 35,627, which is an increase of 62%

Most of these trends are compatible with the provisional results of the LDHS 2013 (see table 6).

Table 6 Comparison of selected indicators of DHS 2013 with DHS 2007

SN	DHS Indicators	DHS 2007	DHS 2013
1	Total Fertility Rate	5.2	4.7
2	Infant mortality per 1,000 live birth	72	54
3	DPT/Pentavalent 3	50	71
4	CPR for (modern methods) (%)	11	19
5	ANC1 (%)	79	96
6	Facility delivery (%)	37	56
7	SBA (%)	46	61
8	IPT2 (%)	45	48

In spite of these successes, several challenges and constraints remain. RBHS has continued to work with the MOHSW and partners on these issues and progress has made in addressing each of them.

The most challenging issue faced by RBHS is the absorptive capacity of counterparts within the MOHSW and county health teams (CHTs). Most of the capacity building interventions have to compete with routine activities of the central MOHSW and the CHSWTs and the requirements and opportunities that other donors present. Also, as a result of a more than ten years period of civil unrest and instability, many of the mid-level professionals have limited basic education and professional training.

Another hurdle in the gradual move towards a decentralized service delivery system is the ongoing fragmentation of the health system. National disease oriented programs continue to dominate service delivery management and are barriers to the implementation of the integrated

service delivery by the counties. Internal communications between programs at central level and between the central level and the CHSWTs are dysfunctional. While RBHS has started to support the MOHSW and the development of an internal communications strategy and test out implementation with NMCP, progress is slow and needs more time.

Supportive supervision is a key intervention to improve the quality of service delivery. While RBHS has provided technical support to the development of tools for supportive supervision and to the organization of regular supervisory visits, the ultimate steps to benefit from supportive supervision are not yet in place: feedback to the care providers and support them in solving the problem identified. These steps require the introduction of a coaching culture by managers and supervisors and gradual change in behavior from hierarchical and administrative attitudes to a new set of values such as mentoring and staff development.

Future Directions

As stated several times in this report, continued work on comprehensive capacity building will be required for sustainable results on health system strengthening and for impact on health outcomes. The one year extension of RBHS is therefore an excellent opportunity to continue many of the ongoing interventions and better prepare a transition strategy before the end of the project. We will also continue our support to the implementation of the FARA, which will end in 2015, and help prepare for a renewed mechanism of direct funding by the USG to the GOL.

At the request of USAID, RBHS has prepared an extension work plan in close collaboration with the MOHSW. The new End-of-Project date is October 31, 2014, but most activities will end in July 2014 to allow for the close-out of the project. Some highlights of the proposed interventions in each of the six building blocks are:

- *Service Delivery*

During the extension year, RBHS will help institutionalize the supportive supervision system with a focus on feedback and problem solving. Both the supportive supervision and the QA/QI process will be integrated into an in-service training program, to institutionalize continuing education as durable mechanism to improve the quality of service delivery. RBHS will also continue to expand and solidify PBF in the FARA counties as another mechanism to improve the quality of service delivery.

RBHS will also work closely with the MOHSW and the counties to solidify the community health services delivery system, including the scale up of Misoprostol distribution, family planning, and iCCM.

- *Human Resource management*

RBHS will further work with the MOHSW on human resource management by setting up a performance appraisal system in collaboration with CSA and GEMS. Performance appraisal is another opportunity to work on the establishment of a “coaching culture”, and can form the basis of a more robust performance management system and merit based civil service over time.

- *HMIS and Monitoring & Evaluation*

The work on HMIS strengthening will continue focusing on the use of information for decision making and problem solving. RBHS will also support the Ministry of Health in better integrating various data sources via the establishment of a integrated data depository (data warehouse)

- *Supply chain management and infrastructure*

RBHS in close collaboration with DELIVER will support the MOHSW to gradually decentralize supply chain management to the county level. Also, continued support will be provided to the Infrastructure Unit and to the construction of new Central Drug Warehouse.

- *Health Insurance*

RBHS and its partner ICD will continue to provide support to the GOL to implement the proposed interventions of the Liberia Health Equity Fund (LHEF) roadmap.

- *Coordination and Leadership*

None of the earlier proposed reforms can be implemented without leadership at both central and county levels. RBHS will provide STTA to organize participatory training for senior managers at the central level and in the FARA counties.

Annex 1A: RBHS Indicator Status Report – aggregated for FARA Counties

No.	Indicator	EOP		Status July 2011 - June 2012	Achievement (July 2012- June 2013)	Comments
		Target	Year			
Strategic Objective: Increased Use of Essential Health Services						
1	% of deliveries in facility by a skilled birth attendant (SBA)	65%	2013	51%	61%	
2	% of women 15-49 currently using modern contraceptives	11%	2013	NA	NA	Will be measured in EOP survey
3	% of children under 1 year who received pentavalent-3 vaccination	90%	2013	92%	100%	
4	Utilization rate (new curative consultations per year per capita)	1	2013	0.82	1.01	
5	% of pregnant women provided with 2 nd dose of IPT for malaria	90%	2013	47%	51%	
6	Number of HIV positive pregnant women who are initiated on PMTCT prophylaxis (ARV, ART)	300	2013	424	289	
6a	% of HIV positive pregnant women who are initiated on PMTCT prophylaxis (ARV, ART)	NA	NA	74%	67%	
7	% of women and men age 15-24 reporting having sexual intercourse and using a condom during the last intercourse	10% (F), 20%(M)	2013	NA	NA	Will be measured in EOP survey

Annex 1A: RBHS Indicator Status Report – aggregated for FARA Counties

No.	Indicator	EOP		Status July 2011 - June 2012	Achievement (July 2012- June 2013)	Comments
		Target	Year			
8	Case notification rate (CNR) of new sputum smear positive pulmonary TB cases per 100,000 population	160	2013	NA	51	Active case finding is lacking
9	% of facilities with no stock-out tracer drugs during the quarter (amoxicillin, cotrimoxazole, paracetamol, ORS, iron folate)	95%	2013	NA	79%	FARA facilities, MOHSW, PBF unit
10	[# and] % of timely, accurate and complete HIS reports submitted to the CHT during the quarter	95%		NA	88%	Timeliness is 62%
11	% of facilities reaching two-star level in accreditation survey	25%	2013	0%	NA	MOHSW has not published it yet
12	Average % clinical standards met in assessment	50%	2013	43%	43%	Draft MOHSW Accreditation 2013 report
13	% of NGOs submitting timely and complete quarterly report to RBHS project					Dropped because RBHS does not manage NGOs anymore
<i>Intermediate Result 1: Increased access to essential health services through improved provision of quality health services and adoption of positive health behaviors</i>						
<i>Intervention 1.1: Increase access to comprehensive maternal, neonatal, and child health (MNCH) services</i>						

Annex 1A: RBHS Indicator Status Report – aggregated for FARA Counties

No.	Indicator	EOP		Status July 2011 - June 2012	Achievement (July 2012- June 2013)	Comments
		Target	Year			
14	Number of child pneumonia cases treated with antibiotics during the quarter	36,000	2013	46,864	58,668	
14a	% of child pneumonia cases treated with antibiotics during the quarter			100%	99%	
15	% of women receiving AMTSL who delivered in health facility by SBA	17,000	2013	NA	NA	It is not part of current HMIS reporting form
16	% of newborns receiving essential newborn care who were born in health facility by SBA	17,000	2013	NA	NA	It is not part of current HMIS reporting form
17	% of pregnant women having at least 4 antenatal care (ANC) visits with skilled providers	85%	2013	68%	69%	
18	Number of facilities with certified midwife	95%	2013	NA	NA	Quantitative analysis of integrated supervision data is lacking.
19	Number of children treated through iCCM annually			NA	NA	Community HIS is not in place
<i>Intervention 1.2: Increase uptake of three critical malaria interventions: treatment with ACT, preventive treatment of pregnant women, and sleeping under ITNs</i>						
20	% of children under 5 treated with Artemisinin-based Combination Treatments (ACTs)	90%	2013	87%	91%	
21	% of facilities with no stock outs of ACT drugs			NA	NA	Quantitative analysis of integrated supervision data is lacking.

Annex 1A: RBHS Indicator Status Report – aggregated for FARA Counties

No.	Indicator	EOP		Status July 2011 - June 2012	Achievement (July 2012- June 2013)	Comments
		Target	Year			
<i>Intervention 1.3. Increase access to quality HIV/AIDS and TB services, with an emphasis on prevention</i>						
22	Number of people who received HIV counseling and testing and received their test results	23,000	2013	61,516	68,701	
22a	% of people who received HIV counseling and testing and received their test results			98%	99%	
23	Number of adults and children with advanced HIV infection receiving ART	350	2013	449	719	
24	Number of eligible adults and children provided with a minimum of one care service	817	2013	925	1345	
25	Number of targeted population reached with individual and/or small group HIV prevention interventions that are based on evidence and/or meet minimum standards	100000	2013	NA	NA	Will be measured in EOP survey
26	Percent of registered new smear-positive pulmonary TB cases that were cured and completed treatment under DOTS (i.e. Treatment Success Rate)	85%	2013	NA	83%	
27	Percent of the estimated number of new smear-positive pulmonary TB cases that were detected under DOTS(i.e. Case Detection Rate)	73%	2013	NA	43%	Active case finding is lacking
28	% of men and women aged 15 to 24 in target areas who correctly identify 3 ways of prevention transmission of HIV	60% (F), 70%	2013	NA	NA	Will be measured in EOP survey

Annex 1A: RBHS Indicator Status Report – aggregated for FARA Counties

No.	Indicator	EOP		Status July 2011 - June 2012	Achievement (July 2012- June 2013)	Comments
		Target (M)	Year			
29	% of men and women aged 15 to 24 in target areas who report being able to negotiate condom use with their partner	25% (F), 30% (M)	2013	NA	NA	Will be measured in EOP survey
<i>Intervention 1.4. Increase access to comprehensive family planning and reproductive health (FP/RH) services</i>						
30	% of service delivery points providing FP counseling or services (pills, IUD, implants, voluntary sterilization), by type of service	95%	2013	NA	NA	Quantitative analysis of integrated supervision data is lacking.
31	Number of counseling visits for FP/RH	50,000	2013	17,567	55,975	
32	Couple-years of contraceptive protection provided	13,000	2013	21,949	35,627	
32a	Couple-years of contraceptive protection provided /100 women of child bearing age (WCBA)			8	13	
33	Amount of CYP distributed by gCHVs	TBD		NA	NA	Community HIS is not in place
34	Percent of audience who recall hearing or seeing a specific USG-supported Family Planning or Reproductive Health Message	75%	2013	NA	NA	Will be measured in EOP survey

Annex 1A: RBHS Indicator Status Report – aggregated for FARA Counties

No.	Indicator	EOP		Status July 2011 - June 2012	Achievement (July 2012- June 2013)	Comments
		Target	Year			
35	% of men and women aged 15 to 24 in target areas who know a modern contraceptive that can prevent pregnancy	15% point from baseline	2013	NA	NA	Will be measured in EOP survey
36	% of men and women aged 15 to 24 in target areas who know the sign and symptoms of STI	10% point from baseline	2013	NA	NA	Will be measured in EOP survey
37	Percentage of health facilities with no stock out of family planning methods	85%	2013	NA	NA	Quantitative analysis of integrated supervision data is lacking.
<i>Intervention 1.5: Infrastructural work including environmental interventions and Pharmaceutical procurement</i>						
38	% of facilities adhering to proper medical waste disposal (solid waste, sharps, infectious waste, latrines)	90%	2012	NA	NA	Quantitative analysis of integrated supervision data is lacking.
39	% of facilities with adequate infection control standards (water and soap, gloves, high level disinfection and/or sterilization of equipment, etc)	90%	2012	NA	NA	Quantitative analysis of integrated supervision data is lacking.
40	% of facilities with operating hand pump or an equivalent safe water source	90%	2012	NA	NA	Quantitative analysis of integrated supervision data is lacking.

Annex 1A: RBHS Indicator Status Report – aggregated for FARA Counties

No.	Indicator	EOP		Status July 2011 - June 2012	Achievement (July 2012- June 2013)	Comments
		Target	Year			
41	Number of liters of water disinfected with point-of-use treatment					Dropped because RBHS does not manage it anymore
42	Number of nursing schools renovated by RBHS	2	2011	NA	2	Cumulative: TNIMA, EBSNM
Intermediate Result 2: Increase the quality of health services through improving infrastructure, health workforce and systems performance by enhancing capacity to plan, manage and monitor a decentralized health system						
<i>Intervention 2.1: Build capacity of the Central MOHSW through the six building blocks of a health system</i>						
43	Number of policies or guidelines developed or changed to improve access to and use of Basic Health Services	40	2013	NA	72	Cumulative
44	MOHSW supervision SOP reviewed, validated and implemented	2	2013	NA	2	Cumulative
45	MHOSW Quality Improvement unit institutionalized	3	2013	NA	3	Cumulative
46	MOHSW PBF operation guide developed and implementation supported	3	2013	NA	3	Cumulative
47	MOHSW PBF M&E plan developed and implementation supported	3	2013	NA	3	Cumulative
48	MOHSW PBF Bonus strategy developed and training provided	3	2013	NA	3	Cumulative
49	Number of MOHSW and stakeholder trained on data validation	3	2013	NA	3	Cumulative

Annex 1A: RBHS Indicator Status Report – aggregated for FARA Counties

No.	Indicator	EOP		Status July 2011 - June 2012	Achievement (July 2012- June 2013)	Comments
		Target	Year			
50	MOHSW HMIS and M&E strengthened with training on use of information and institutionalization of feedback system	3	2013	NA	3	Cumulative
51	Number of people who completed the training/academic courses supported by FORECAST scholarship	46	2012	NA	48	
52	Design standards and project delivery guidelines for both new construction and for renovations developed and validated.	2	2012	NA	2	
53	Capacity assessment undertaken and strategic plan and M&E plan developed for central MOHSW	1	2012	NA	1	
54	Updated MOHSW human resource policy and plan	1	2013	NA		
<i>Intervention 2.2: Strengthen MOHSW systems and human capacity at county level in Bong, Lofa, and Nimba</i>						
55	% of facilities reaching one-star level in accreditation survey	80%	2013	13%	NA	MOHSW has not published it yet
56	% of all OPD patients for whom no more than 3 drugs are prescribed (random sample)					Dropped because MOHSW PBF dropped it
57	% of facilities that received at least 2 joint supportive supervision visits in last quarter	90%	2013	NA	100%	1 joint supervision as practiced by MOHSW PBF unit

Annex 1A: RBHS Indicator Status Report – aggregated for FARA Counties

No.	Indicator	EOP		Status July 2011 - June 2012	Achievement (July 2012- June 2013)	Comments
		Target	Year			
58	% of facilities that received at least 3 supportive clinical supervision visits in last quarter	90%	2013	NA	100%	
59	% of facilities whose CHDCs held at least 3 meetings in last quarter	95%	2013	NA	88%	
60	% of gCHVs who received at least 1 supervision visit in last quarter	90%	2013	NA	81%	
61	[# and] % of timely, accurate and complete HIS reports submitted to the CHT during the quarter	95%		NA	88%	Timeliness is 62%
62	Number of people trained in monitoring and evaluation	495	2013	NA	317	
	Males				271	
	Females				46	
63	Number of CHT staff trained in PBF data validation	185	2013	NA	0	
64	Number of county for which capacity assessment undertaken and capacity building operation plan and M&E plan are developed	3	2013	NA	3	
65	Number of counties with strengthened human resource management	3	2013	NA		
67	Number of health facility staff trained in programmatic areas (HCT, PMTCT, HIV	255	2013	NA	433	

Annex 1A: RBHS Indicator Status Report – aggregated for FARA Counties

No.	Indicator	EOP		Status July 2011 - June 2012	Achievement (July 2012- June 2013)	Comments
		Target	Year			
	prevention, Malaria, IPT, MNH, Child health and nutrition, FP/RH, TB)					
	Males			NA	200	
	Females			NA	233	
68	Number of health facility staff trained in PBF	1,114	2013	NA	134	
69	Number of staff trained in HMIS and use of information for DM at facility and patient/client levels	175	2013	NA	0	
<i>Intervention 2.3: Strengthen Professional Health Institutions, including TNIMA, EBSNM, LBNM, and LMDC</i>						
70	Number of person enrolled in pre-service activities	970	2013	NA	188	
71	Number of schools whose capacity is assessed and plan developed for improvement	5	2013	NA	3	
72	Number and type of updated curricula approved by MoHSW	4	2012	NA	5	
73	Number of schools adopting improved curriculum	7	2012		3	
74	Percentage passed on new curriculum by various schools	75%	2013		87%	

Annex 1B: Selected RBHS Indicators for Bong, Nimba and Lofa: Comparison Year 4 and Year 5

No.	Indicator	FARA counties		Bong Achievement		Nimba Achievement		Lofa Achievement	
		Jul 2011- Jun 2012	Jul 2012- Jun 2013	Jul 2011- Jun 2012	Jul 2012- Jun 2013	Jul 2011- Jun 2012	Jul 2012- Jun 2013	Jul 2011- Jun 2012	Jul 2012- Jun 2013
1	% of deliveries in facility by a skilled birth attendant (SBA)	51%	61%	47%	58%	54%	63%	50%	61%
3	% of children under 1 year who received pentavalent-3 vaccination	92%	100%	97%	102%	93%	100%	86%	97%
5	% of pregnant women provided with 2 nd dose of IPT for malaria	47%	51%	46%	54%	53%	52%	39%	48%
6	Number of HIV positive pregnant women who are initiated on PMTCT prophylaxis (ARV and ART)	424	289	53	76	260	156	111	57
6a	% of HIV positive pregnant women who are initiated on PMTCT prophylaxis (ARV and ART)	74%	67%	35%	66%	84%	84%	97%	43%
14	Number of child pneumonia cases treated with antibiotics during the quarter	46,864	58,668	11,318	12,620	25,086	30,109	10,460	15,939
14b	% of child pneumonia cases treated with antibiotics during the quarter	100%	99%	100%	100%	100%	100%	99%	97%
17	% of pregnant women having at least 4 antenatal care (ANC) visits with skilled providers	68%	69%	66%	59%	66%	75%	75%	70%
20	Percent of children under 5 treated with Artemisinin-based Combination	87%	91%	93%	93%	87%	90%	82%	89%

Annex 1B: Selected RBHS Indicators for Bong, Nimba and Lofa: Comparison Year 4 and Year 5

No.	Indicator	FARA counties		Bong Achievement		Nimba Achievement		Lofa Achievement	
		Jul 2011- Jun 2012	Jul 2012- Jun 2013	Jul 2011- Jun 2012	Jul 2012- Jun 2013	Jul 2011- Jun 2012	Jul 2012- Jun 2013	Jul 2011- Jun 2012	Jul 2012- Jun 2013
	Treatments (ACTs)								
22	Number of people who received HIV counseling and testing and received their test results	61,516	68,701	19,115	18,392	29,643	34,223	12,758	16,086
22a	% of people who received HIV counseling and testing and received their test results	98%	99%	100%	100%	97%	100%	96%	98%
23	Number of adults and children with advanced HIV infection receiving ART	449	719	75	111	201	385	173	223
31	Number of counseling visits for FP/RH	17,567	55,975	12,523	31,068	4,965	23,854	79	1,053
32	Couple-years of contraceptive protection provided	21,949	35,627	6,962	9,683	8,718	14,754	6,270	11,191
32a	Couple-years of contraceptive protection provided /100 women of child bearing age (WCBA)	8	13	8	11	8	13	9	16

Annex 2: RBHS participation in National Committees, Working Groups, and Task Forces updated 31 October 2013

Topics	RBHS contributor
Child Health Task force	Rose Macauley
Community Health Coordination committee	Catherine Gbozee
Decentralization Working group	Theo Lippeveld
Education and Training National Working Group	Marion Subah & Nowai Johnson
FARA Steering Committee	Rose Macauley, Theo Lippeveld, Floride Niyuhire
Health Financing Task Force	Theo Lippeveld & Zaira Alonso
Health Promotion Working Group	Marietta Yekee, Teah Doegmah
Health Sector Coordinating Committee	Rose Macauley, Theo Lippeveld
Human Resource Technical Committee	Marion Subah
Laboratory Technical Working Group	Marion Subah, Lauretta Nagbe & Sarah Hodge
Malaria Indoor Residual Spraying Task Force	Marietta Yekee, Theo Lippeveld
Malaria Partners	Marietta Yekee, Theo Lippeveld
Malaria Steering Committee	Marietta Yekee, Theo Lippeveld
Maternal Neonatal Mortality Reduction Technical Committee	Marion Subah, Rose Macauley
Mental Health Technical Coordinating Committee	David Franklin
Monitoring and Evaluation Coordination Committee	Bal Ram
Monitoring, Evaluation, and Research Technical Working Group	Bal Ram Bhui
National Nutrition Coordination Committee	Rose Macauley, Catherine Gbozee & Sarah Hodge
National Task Force on Health Infrastructure	Zaira Alonso, Joe Moyer
Program Coordinating Team	Rose Macauley
Reproductive Health Technical Committee	Maima Zazay, Sarah Hodge, Marion Subah
Supply Chain Technical Working Group	Theo Lippeveld

Annex 2: RBHS participation in National Committees, Working Groups, and Task Forces updated 31 October 2013

Topics	RBHS contributor
PMTCT Technical working Group	Marion Subah
PBF Technical Team	Floride Niyuhire, Bal Ram Bhui
Environmental Health Waste Management Task Force	Joe Moyer
Reproductive Health Laws Drafting committee	Marion Subah
National HIV/TB technical working group	Marion Subah
Capacity Assessment Core Group	Judith Oki
HIV Partners Meeting	Marion Subah
Performance Based Financing Stakeholders Consultation Meeting	Floride Niyuhire
Human Resource Working Group	Zaira Alonso
C-HMIS Roll out Working Group	Bal Ram Bhui, Julius Lekpeh, Theo Lippeveld
Community Health Roadmap development working group	Theo Lippeveld

Annex 3: RBHS Contributions to National Policies, Strategies, Plans, and Technical Documents, updated 31 October 2013

Documents	RBHS contributions
Adolescent Sexual and Reproductive Health Strategy and Standards	Maima Zazay & Marion Subah
Family Planning and Reproductive Health Strategy	Maima Zazay, Rose Macauley, Marion Subah
Malaria Integrated Vector Control Policy	Theo Lippeveld, Marietta Yeekeh
Maternal and Neonatal Protocols	Marion Subah, Sarah Hodge
National Guidelines for Initiating and Implementing Community Based FP Programs	Maima Zazay, Marion Subah & Gillian Burkhardt
Road Map for Accelerating the Reduction of Maternal and Newborn Morbidity and Mortality in Liberia (2011-2015)	Maima Zazay, Marion Subah, Sarah Hodge
Community Health Policy and Strategy and CDHC guidelines	Catherine K.Z. Gbozee, Dr. Rose Macauley
Liberia Reproductive Health Road Map	Sarah Hodge, Marion Subah & Maima ZayZay
Maternal and Newborn Care Procedures and Protocols	Sarah Hodge, Marion Subah & Maima Zazay
National Health Communication Strategy	Joshua Ofori, Marietta Yeekeh, Teah Doegmah
Adaptation of the Home base life saving skills training curriculum	Sarah Hodge
Drafting of referral job aid for obstetric emergencies	Sarah Hodge, Marion Subah & Gillian Burkhardt
Capacity Assessment Framework	Theo Lippeveld
Capacity assessment tools – central MOHSW	Theo Lippeveld
Capacity assessment tools – County level	Theo Lippeveld
Operational Plans for conducting capacity assessments	Theo Lippeveld
Terms of reference for members of Capacity	Theo Lippeveld

Annex 3: RBHS Contributions to National Policies, Strategies, Plans, and Technical Documents, updated 31 October 2013

Documents	RBHS contributions
Assessment Team (CAT)	
Instructions for conducting capacity assessment interviews	Theo Lippeveld
Revise community health policy, strategy and CHDC guideline	Catherine Gbozee
Revised Malaria training Module	Catherine Gbozee
Revised gCHVs treatment register	Catherine Gbozee
Community health information system tools	
National Health Promotion Policy	Teah Doegmah
Reproductive Health Laws	Marion Subah, Sarah Hodge, & Maima Zazay
Performance Based Financing Operational Manual	Floride Niyuhire
Accelerated action plan for the reduction of Maternal Mortality	Marion Subah, Sara Hodge
The Quality Improvement Team	Catherine Gbozee, Marion Subah
The supervision tools for central level monitors	Catherine Gbozee
CHV Mapping Tool	Catherine Gbozee, Theo Lippeveld, Bal Ram Bhui
The clinic level/OPD Clinical standards	Catherince Gbozee
Community HIS reporting forms	Theo Lippeveld, Bal Ram Bhui, Catherine Gbozee
DHIS 2 training module	RBHS Consultant, Romain Tohouri
Performance Based Contracting in Guidelines	Judith Oki, Floride, Wendy Abramson
Infrastructure policy	Joe Moyer
Health Facility Building Standards	Joe Moyer
gCHV Mapping Survey Report	Bal Ram Bhui, Theo Lippeveld
C-HMIS SOP	Bal Ram Bhui, Julius Lekpeh, Theo Lippeveld
MNCH Technical Working Group/AAP	Marion Subah

Annex 3: RBHS Contributions to National Policies, Strategies, Plans, and Technical Documents, updated 31 October 2013

Documents	RBHS contributions
implementation TWG	
Community Based Family Planning Training Materials and Job Aids	Maima Zazay, Marion Subah
Adolescent Sexual and Reproductive Health Training Materials	Maima Zazay, Marion Subah
Assessment Tools for Health Facilities	Nyanquoi Kargbo, Marion Subah, Nowai Johnson
Community Health Roadmap	Theo Lippeveld, Marion Subah, Tracy Slagle

Annex 4A: Trainings undertaken by RBHS and in collaboration with Partners

October 1, 2012 to September 30, 2013

County	Sponsor	Topic	Facilitators	Days	Start	Persons	Target	Male	Female
MCH									
Montserrado, Bomi and Cape Mount	UNICEF, FHD	TOT, ENA	UNICEF, MOHSW/FHD, SAMIRATAN PURSE	15	29-Mar-12	15	Health Facility Staff	5	10
Montserrado	RBHS	BLSS/EmONC	Sarah Hodge, RBHS, Nancy Moses, LPMM	13	15-Jan-13	22	Pre service instructors, practicing nurses, midwives	2	20
Bong, Nimba, Lofa	RBHS	Maternal & Newborn Mortality Audits	Sarah Hodge, RBHS, Jemima Brown, MOH/FHD, sumo FHD/MOH	3	26-Mar-13	39	DHOs, RBHS field staff	32	7
Margibi	RBHS	Adaptation of IMNCI 11 Days to 6 Days	Sarah Hodge RBHS, Mendea Jallah MOH/FHD	4	2-Apr-13	22	Course Directors, IMNCI facilitators	6	16
Lofa, Bong, Nimba	RBHS	HBMNC TOT	Sarah Hodge, Nancy Gaysue FHD, lpmm	5	1-- July 13	32	RH sup, DHOs, Clinical sup	3	29
Cape Mount	RBHS	Use of specialized equipment for EmONC	MOH/RBHS	2	10-Jul-13	20	OR Tech, ward staff of OB, ER, CSR, staff, lab tech,	3	17
Lofa, Bong, Nimba	RBHS	ENA	Abdule, RBHS, ND/MOH	5	5 -- Aug 13	31	DHOs, county RH sup, DHRS, Clinical sup.	20	11

Annex 4A: Trainings undertaken by RBHS and in collaboration with Partners

October 1, 2012 to September 30, 2013

County	Sponsor	Topic	Facilitators	Days	Start	Persons	Target	Male	Female
TOTAL						181		71	110
Malaria									
Nimba	MOHSW/G lobal Fund	Malaria Case Management	Rebecca Varplalah- MOH Luogon Willie- Paye-RBHS	5	26- Nov- 12	50	Facility Staff	32	18
Nimba	MOHSW/G lobal Fund	Malaria Case Management	Joshua Weah-NMCP , Luogon Willie-Paye- RBHS	5	20- Mar- 13	25	Facility Staff	16	9
Lofa	MOHSW/G lobal Fund	Malaria Case Management		5		50	Facility Staff	32	18
Bong	MOHSW/G lobal Fund	Malaria Case Management		5		50	Facility Staff	32	18
TOTAL						175		112	63
FP/RH									
Nimba	Africare/ MOHSW/U SAID	Comprehensive FP	Lawrina Donkeh- Africare, Luogon Willie-Paye-RBHS	9	1-Dec- 12	35	Facility Staff	10	25
Nimba	MOHSW	FP Counseling & methods	Luogon Willie-Paye- RBHS, Priscilla Mabiah-NCHT	2	23- Feb- 13	7	Facility Staff	0	7
Bong	RBHS	Family Planing	Maima Zazay, Marie Padmore, Banor Kolliewallah	10	4-Sep- 13	20	Health Facility Staff	2	18
TOTAL						62		12	50
PBF									

Annex 4A: Trainings undertaken by RBHS and in collaboration with Partners

October 1, 2012 to September 30, 2013

County	Sponsor	Topic	Facilitators	Days	Start	Persons	Target	Male	Female
Montserratado	MOHSW & RBHS	PBF Management Tool for Counties	Angie Lee (RBHS), Dominic Togba(MOHSW)	2	27-Mar-13	30	Central MOHSW	10	20
Montserratado	MOHSW & RBHS	PBF Stakeholders connection Meeting	Jean Kogubare(RBHS), Louise Mapleh(MOH)	2	4-Apr-13	58	Technical - Financial Partners for MOHSW	17	41
Montserratado	MOHSW & RBHS	PBF Training and knowledge each one	Jean Kogubare(RBHS), Dominic Togba (MOHSW)	2	18-Apr-13	46	Central MOHSW	17	29
TOTAL						134		44	90
QUALITY IMPROVEMENT									
Grand Bassa	RBHS	Development of In - Patient Quality Clinical Standards	Drs. Salwa Bitar and Fabio Castano (RBHS)	5	17-Sep-12	50	MOHSW Central Level staff	37	13
Bong	MOHSW/ RBHS	Development of In - Patient Quality Clinical Standards	Catherine K.Z. Gbozee (RBHS), Sam Ticker	10	13-Feb-13	50	MOHSW Central Level staff	37	13
Nimba	RBHS	Training to Pilot standard of assessor	Catherine K.Z. Gbozee	2	2-Apr-13	8	MOHSW Program Staff, Health Worker - JDJ,	4	4

Annex 4A: Trainings undertaken by RBHS and in collaboration with Partners

October 1, 2012 to September 30, 2013

County	Sponsor	Topic	Facilitators	Days	Start	Persons	Target	Male	Female
							Clara-Town, Bassa GOL , LMDC, LBNM		
Nimba	RBHS	Training for Assessors Inpatient Clinical Standards for Pilot	John Kollie, Nancy Moses, Catherine Gbozee	3	2-Apr- 13	10	Professional Health Workers	5	5
Montserra do	RBHS	Training of National monitors for accreditation	Marion Subah, Teta Lincoln,Catherine Gbozee	5	22- Apr- 13	28	Professional Health Workers	8	20
Bong	RBHS	Orientation Of community Health Services policy and Strategy	Catherine K. Z. Gbozee	1	19- Jun- 13	33	Professional staffs (DHOs, CHOs,etc), Community Leaders, etc	22	11
Montserra do	RBHS	Improvement Collaborative Facilitators Orientation and Workshop	Catherine K. Z. Gbozee, Salwa Bitar	2	31- Jul-13	20	CBOs, Program Managers,CH DDs	7	13
Montserra do	RBHS	Improvement Collaborative Team Orientation and Workshop	Catherine K. Z. Gbozee, Salwa Bitar, Lisa, Pelcovits, John Kollie,Nancy Moses	4	5- Aug- 13	42	Hospital Supervisors, etc	19	23
TOTAL						241		139	102
BCC									
Nimba	RBHS/US AID	CHEST KIT	T. Doegmah-RBHS, Garmetta Brown	3	17- Dec-	70	gCHVs	58	12

Annex 4A: Trainings undertaken by RBHS and in collaboration with Partners

October 1, 2012 to September 30, 2013

County	Sponsor	Topic	Facilitators	Days	Start	Persons	Target	Male	Female
			NHPD		12				
Nimba	RBHS/US AID	CHEST KIT	T. Doegmah-RBHS, Garmetta Brown NHPD	3	31-Dec-12	70	gCHVs	52	18
Nimba	RBHS/US AID	CHEST KIT	Teah Domah-RBHS, Kao Wathouson	3	25-Feb-13	70	gCHVs	55	15
Bong	RBHS/US AID	Material and Message development HP Focal Persons	Marietta Yekee RBHS, Teah Doegmah, RBHS, Sarah Hodge, RBHS, Joe Smith CHT	4	6-May-13	27	District HP focal persons	24	3
Monrovia	RBHS/US AID	SBCC Monitoring and Evaluation training	Stella Babalola JHU/CCP	1	1-Jul-13	20	M & E Officers (central and county staff)	15	5
Monrovia	RBHS/US AID	Journey of Hope TOT training	Marietta Yekee, RBHS, Teah Doegmah, RBHS, David Zazay CHSD, Gabriel Hina, NHPD	4	30-Jul-13	27	NACP CBOs and Staff	19	8
Monrovia	RBHS/US AID	BCC/Health Promotion Focal person training	Marietta Yekee RBHS, Teah Doegmah, RBHS, Richard Zeon, NHPD, Garmetta T. Brown, NHPD	4	August	22	BCC focal person from various MOH programs	11	11
TOTAL						306		234	72

Annex 4A: Trainings undertaken by RBHS and in collaboration with Partners

October 1, 2012 to September 30, 2013

County	Sponsor	Topic	Facilitators	Days	Start	Persons	Target	Male	Female
M&E									
Nimba	RBHS	HMIS data use workshop part I	Bal Ram Bhui(RBHS), Stephen Gbanyan(MOH), George Jacobs(MOH)	2	19-Nov-12	20	CHTs	17	3
Nimba	Africa/US AID	Identification and calculation of PBF Indicators	1. John Nenwah-Africare 2. Luogon Willie-paye-RBHS	1	17-Dec-12	35	Supervisors (CHTs & NGO)	32	3
Margibi	MOHSW & RBHS	Data analysis training jointly with MOHSW	Bal Ram Bhui(RBHS), Stephen Gbanyan(MOH), Jacob(MOH)	4	15-Jan-13	30	CHTs	26	4
Bong	RBHS	HMIS data use workshop part I	Bal Ram Bhui(RBHS), Stephen Gbanyan(MOH), George Jacobs(MOH)	2	4-Feb-13	40	CHTs	33	7
Bong	RBHS	Orientation on the Use of Training Database	Emmanuel Dahnweih & Julius Lekpeh	1	5-Jun-13	13	CHT STAFF	12	1
Lofa	RBHS	Orientation on the Use of Training Database	Emmanuel Dahnweih & Julius Lekpeh	1	7-Jun-13	13	CHT staff	11	2
Nimba	RBHS	Orientation on the Use of Training Database	Emmanuel Dahnweih & Bal Rham Bhui (RBHS)	1	24-Jun-13	20	CHTs Staff	16	4
Nimba	RBHS	HMIS data use workshop part II	Bal Rham Bui (RBHS) and Stephen Gbanyan (MOHSW)	2	25-Jun-13	34	CHTs Staff	29	5

Annex 4A: Trainings undertaken by RBHS and in collaboration with Partners

October 1, 2012 to September 30, 2013

County	Sponsor	Topic	Facilitators	Days	Start	Persons	Target	Male	Female
Montserrat	RBHS	DHIS2 WORKSHOP (iReport Feature)	Dr. Romain Tohouri (JSI, Cote d'Ivoire)	3	7-Aug-13	15	HMIS & M&E Staff of Central MOHSW and RBHS	12	3
Montserrat	RBHS	MY SQL and PostgreSQL	Dr. Romain Tohouri (JSI, Cote d'Ivoire)	3	19-Aug-13	9	MOHSW & RBHS Staff	8	1
Nimba	RBHS	HMIS data use workshop part III	Bal Rham Bui (RBHS), Stephen Gbanyan (MOHSW), Stephanie Watson Grant (MEASURE Evaluation) & Mike Mulbah (MOHSW)	2	23-Sep-13	43	CHT Staff	37	6
Bong	RBHS	HMIS data use workshop part III	Bal Rham Bui (RBHS), Stephen Gbanyan (MOHSW), Stephanie Watson Grant (MEASURE Evaluation), (MOHSW), Theo Lippeveld (RBHS), Julius Lekpeh (RBHS)	2	18-Sep-13	45	CHT Staff	38	7
TOTAL		12				340		294	46
Pre-Service									

Annex 4A: Trainings undertaken by RBHS and in collaboration with Partners

October 1, 2012 to September 30, 2013

County	Sponsor	Topic	Facilitators	Days	Start	Persons	Target	Male	Female
Montserrat	RBHS	EHT Procedure Manual Development	Kerkulah Kollie, Sarah Kollie & Marion Subah	2	18-Mar-13	15	EHT Steering Committee	10	5
Montserrat	RBHS	Students' Performance Assessment training	Rosemary Kamunya, Marion Subah & Nowai Johnson	4	4-Jun-13	30	Instructors & Clinical Preceptors	17	13
Montserrat	RBHS	Buruli Ulcer Effective Teaching Skills	Marion Subah, Nowai Johnson, F. Zeela Zaizay & Grace Dorbor	4	24-Sep-13	27	Instructors & Clinical Preceptors	11	16
Montserrat	RBHS	Blended Learning Methodologies	Catherine A. Carr, Marion Subah & Nowai Johnson	4	16-Jul-13	23	Instructors & Clinical Preceptors	6	17
Montserrat	RBHS	SBMR Module 3 workshop	Dr. Emmanuel Otolorin, & Marion Subah	2	8-May-13	40	Instructors & Clinical Preceptors	18	22
Montserrat	RBHS	managing clinical practice for skilled lab instructors	Lastina Lwatula, Marion Subah & Nowai	4	13-Aug-13	23	Instructors & Clinical Preceptors	3	20
Montserrat	RBHS	LMDC Monitoring Tools Validation Workshop	Dr. Nyaquoi Kargbo & Nowai Johnson	1	17-Jul-13	30	Health Care Providers	17	13
TOTAL						188		82	106
Other									
Montserrat	RBHS	AutoCAD Design Software	Emmanuel Oconnor, Contractor	2	18-Mar-13	5	Central MOHSW Infrastructure	5	0
Montserrat	RBHS	Preparation of Community	Mary Cornel	2	8-Jan-	25	Central	4	21

Annex 4A: Trainings undertaken by RBHS and in collaboration with Partners

October 1, 2012 to September 30, 2013

County	Sponsor	Topic	Facilitators	Days	Start	Persons	Target	Male	Female
do		operational Plan			13		MOHSW		
TOTAL						30		9	21
GRAND TOTAL						1634		974	660

Annex 4B: FORECAST Participants

Participants who have completed the program:

Participant Name	Training Event	Employer	Training Dates
Cecelia Flomo	Royal Inst of Medicine (KIT)/Amsterdam - MPH-MCH; Ped Nursing	Nurse/MOH Phebe; Cuttington	Sept 2010-Sept 2011
Edith Tellewoyan	Royal Inst of Medicine (KIT)/Amsterdam - MPH-MCH; Ped Nursing	Nurse/MOH Phebe; Cuttington	Sept 2010-Sept 2011
George Jacobs	Jimma University/Ethiopia M&E applied to health	MOHSW	Nov 2009-June 22, 2011
Janjay Jones	Jimma University/Ethiopia M&E applied to health	MOHSW	Nov 2009-June 22, 2011
Oral Togbah	Royal Inst of Medicine (KIT)/Amsterdam - MPH-MCH; Ped Nursing	Nurse/MOH Phebe; Cuttington	Sept 2010-Sept 2011
Duredoh George	KNUST/Kumasi Ghana-Pharmaceutical Microbiology	MOHSW	Aug 2009-Dec 2011
Karmo D. Ville	Henley Univ/Reading UK-Finance & Economic Development	Min of Finance Analysts (resp for Ed Sector Pooled Funds)	Oct 2010-Sept 2011
Stephen Marvie	Univ of Manchester/UK-Dev Economics & Policy	Min of Planning & Economic Affairs Asst Minister	Sept 2010-Aug 2011
Tarnue Jeke	Henley Univ/Reading UK-Finance & Economic Development	Min of Finance Analysts (resp for Ed Sector Pooled Funds)	Oct 2010-Sept 2011

Annex 4B: FORECAST Participants

James Beyan	Uganda Mgmt Inst/Kampala Uganda-Human Resources	Beyan Dir of Personnel MOHSW HR	Aug 2009-Aug 2011/Feb 2012
Mawolo Kollie	Uganda Mgmt Inst/Kampala Uganda-Human Resources	Beyan Dir of Personnel & Marwolo Dir of Trng & Prof Devel/ MOHSW HR	Aug 2009-Aug 2011/Feb 2012
John T. Harris	Muhimbili Univ/Dar Es TZ- Pharmaceutical Supply Chain Management	MOH-Dir of County Pharmacy	Nov 2010 - Oct 2012
Peterson Greaves	Phase II & III Medical Equipment Technology/Accra Ghana	MOHSW	June/July 2011 & June/July 2012
Arthur Mulbah	United Methodist Univ/Ganta-Dental Tech	Phebe Hospital, Nurse	Oct 2010-June 2012 (dropped out of program)
Forkpah Flomo	TZ Trng Ctr for Ortho Tech/Moshi TZ- Orthopedic Tech	OrthoTech Supervisor - Handicap Intl	Sept 2010-July 2013

Participants who are still active:

Participant Name	Training Event	Employer	Training Dates
Arthur Brown	Kenyatta University/Lab Tech	MPCHS	Sep 2011-April 2014

Annex 5: Rebuilding Basic Health Services in Liberia

